



CITY OF BEAUMONT FORMAL BID

BID FOR: Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd., Beaumont, Texas 77707

BID NUMBER: TF0122-12

BID DUE: THURSDAY, MARCH 3, 2022 AT 2:00 P.M. (CST)

PRE-BID: A MANDATORY Pre-Bid Conference will be held on
Thursday, February 17, 2022 at 10:00 A.M. (CST)
on site at 950 Langham Rd., Beaumont, Texas 77703.

SUBMIT BID TO: This is a FORMAL BID and must be submitted to:

City Clerk's Office / City Hall
City of Beaumont
801 Main St., Room 125
Beaumont, TX 77701

You may submit your bid by MAIL, in PERSON, or by
COURIER. Bids will NOT be accepted via email or fax.

***CITY OF BEAUMONT
PURCHASING DIVISION***

For bid results Monday-Friday, 8:00 a.m. to 5:00 p.m., call 409-880-3720
or visit our web site at

<https://beaumonttexas.gov/departments/purchasing/bid-information/>

NOTICE TO BIDDERS

Sealed bids will be received by the City Clerk of the City of Beaumont, City Hall, 801 Main Street, Room 125, Beaumont, Texas 77701, until **2:00 P.M. (CST)**, **THURSDAY, MARCH 3, 2022** and all bids will be opened and publicly read in the City Council Chambers on that date for:

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707**

A MANDATORY Pre-Bid Conference will be held on Thursday, February 17, 2022 at 10:00 A.M. (CST) on site at 950 Langham Rd., Beaumont, Texas 77707.

Bids shall be submitted to the City Clerk's Office, City Hall, 801 Main, Room 125, Beaumont, Texas 77701, prior to the above stated time.

Bidding forms, specifications and all necessary information may be obtained from the Purchasing Division, City Hall, 801 Main, Room 315, Beaumont, Texas 77701. Vendors requesting bid packets should call the Purchasing Division at (409) 880-3720 or you may **download the specifications from our website at:** <https://beaumonttexas.gov/departments/purchasing/bid-information/>

Complete sets of said Contract Documents may be purchased at White Reprographics (409) 832-8451 or Triangle Blueprint (409) 835-6810 in Beaumont, Texas. No refund will be made of any charges for sets of Contract Documents.

The City reserves the right to reject any or all bids, or to accept any bid or combination of bids deemed advantageous to it.

Please make reference to Bid Number: **TF0122-12**

Bid Closing Date: **March 3, 2022**

Tina Broussard
City Clerk

First Legal Notice Publication: February 10, 2022

Second Legal Notice Publication: February 17, 2022

GENERAL BID INFORMATION

1. INTENT

The City of Beaumont is requesting bids for furnishing all labor, supervision, and equipment to **repair the light poles at the Athletic Complex #4 softball field** located at 950 Langham Rd., Beaumont, Texas 77707. Work shall be in accordance with the technical specifications.

2. CONTRACT TERM

- 2.1 **This Contract shall start as soon as possible once awarded the project.**
- 2.2 Prices stated in the bid submitted are to be firm for the period of the contract. Price shall be firm for not less than twelve (12) months from date of order.
- 2.3 This contract may be canceled by either party by providing written notice at least thirty (30) days in advance.

3. BID DUE DATE

Bids are due no later than **2:00 P.M. (CST), THURSDAY, MARCH 3, 2022** to:

Physical Address:

City of Beaumont
City Clerk's Office
801 Main St., Suite 125
Beaumont, TX 77701

- OR -

Mailing Address:

City of Beaumont
City Clerk's Office
P.O. Box 3827
Beaumont, TX 77704

Phone No.: 409-880-3745

4. PRE-BID MEETING

A MANDATORY Pre-Bid Conference will be held on

Thursday, February 17, 2022 at 10:00 A.M. (CST)

on site 950 Langham Rd., Beaumont, Texas 77707.

**Only bids submitted by vendors attending the pre-bid conference
will be considered a qualifying bid.**

5. REQUIRED DOCUMENTS FOR BID:

- 5.1** Bid Sheet, pages 18 through 56, including:
- 5.1.1 Bidder Information Sheets;
 - 5.1.2 Original, Unaltered Bid Tables;
 - 5.1.3 House Bill 1295 (HB1295);
 - 5.1.4 House Bill 89 (HB89);
 - 5.1.5 Bid Sheet Continued;
 - 5.1.6 Conflict of Interest Questionnaire;
 - 5.1.7 Statement on Conflict of Interest;
 - 5.1.8 Bid Bond Forms;
 - 5.1.9 Local Vendor Preference, if applicable;
 - 5.1.10 Insurance Affidavit, page 47.
(Certificate of Insurance, pages 48 - 51, may be submitted after
award of contract.)
 - 5.1.11 Wage Rate Requirements forms (initials required on page 56).
- 5.2** All documents listed above **MUST** be submitted for bid to be considered.
- 5.3** Bids must be submitted on the enclosed forms only; any others will be rejected. Bid sheets **CANNOT** be altered. If bidder needs to include additional information, it is to be provided on a separate sheet, with the number of the bid included, as well as the bidder's company name.
- 5.4** All portions of this bid requiring data or information must be filled in completely. Failure to do so may result in bid rejection due to non-response.
- 5.5** Bids are to be submitted as specified. Oral, telegraphic, e-mail or telephone bids or modifications will not be considered.
- 5.6** Certifications, where required shall accompany the bid submission.
- 5.7** Failure to comply with information requested on any of these items will result in disqualification of the bid.
- 5.8** Signatures, where required, must be original; facsimile stamp or computer-generated signatures will NOT be accepted.

6. SIGNATURES

Provide a *valid signature* at all appropriate locations within these bid documents.

7. QUESTIONS

Specific questions concerning items or procedures in this solicitation, shall be submitted via fax or mail, and will be answered in writing through an Addendum. The Addendum will be posted to the City's web page, and provided by email or fax to each person receiving a bid announcement, bid package, or those attending pre-bid meetings. Questions should be directed to the individual named below.

Questions received less than seven (7) days prior to the date of opening bids may not be answered. Only questions that have been resolved by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

8. **NO PERSON** has the authority to verbally alter these specifications. Any changes to specifications will be made in the form of an Addendum which will be made available online at <https://beaumonttexas.gov/departments/purchasing/bid-information/> and will be faxed to the vendors on the bid announcement list.

9. All mathematical calculations will be verified. In the event of an error by bidder, City calculation shall be considered correct. In the event of discrepancies, the unit price stated by vendor shall be considered the bid price.

10. The City reserves the right to accept or reject any response or combination of responses deemed advantageous to it.

11. STATEMENT OF BILLS PAID

Bidder may not be more than sixty (60) days past due on any debt to the City, including but not limited to: water bills, licenses, permits or fees, or more than ninety (90) days past due on property taxes.

12. EQUAL OPPORTUNITY EMPLOYER

The successful bidder shall warrant and agree that he/she is an Equal Opportunity Employer. Should complaints of any form of discrimination, either in dispensation of the service, or within company hiring policies be substantiated, this contract may be terminated immediately.

13. LOCAL VENDOR PREFERENCE

The Texas Local Government Code, Sections 271.905(a) and 271.9051 allow the City to consider a vendor's principal place of business in awarding certain contracts by way of competitive bids. This consideration is in effect to promote economic development opportunities through the

contract by employing local residents and increasing tax revenue. If you are a Beaumont vendor and wish to be considered for application of this preference, fill in the forms at the end of this package and return with your bid.

**14. H.B. 1295 COMPLIANCE –
Texas Ethics Commission Certificate Number**

The Awarded Vendor for the contract shall comply with the requirements of Section 2252.908 of the Texas Government Code as adopted in 2015 as House Bill 1295. The law requires that a governmental entity may not enter in certain contracts with a business entity unless the business entity submits a Disclosure of Interested Parties to the governmental entity. The law applies only to a contract that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least \$1 million.

Compliance with the law requires that the awarded Vendor utilize the Texas Ethics Commission website to enter the required information on Form 1295 and print a copy of the complete form. The form must be signed, notarized and submitted to the contracting government entity.

The City of Beaumont, in the case of contracts formalized by Purchase Order or by other written contract, will notify the Vendor of Award by Council and request the completed Form 1295 within five (5) working days thereafter.

H.B. 1295 SIGNATURE FORM - See page 23 for form requiring signature.

**15. H.B. 89 COMPLIANCE –
Verification –**

The Awarded Vendor for the contract shall comply with the requirements of Senate Bill 252 Ch. 2252 Certification: Texas Government Code, Chapter 2252, Section 2252.152 and Section 2252.153 of the Texas Government Code as adopted in 2017 as House Bill 89 (HB89).

The law requires that a governmental entity may not enter in certain contracts with a business entity unless the business entity submits an executed HB89 Compliance form to the governmental entity.

Compliance with the law requires that the awarded Vendor complete the form and submit with bid or proposal. The form must be signed, notarized and submitted to the contracting government entity.

H.B. 89 SIGNATURE FORM - See page 24 for form requiring signature.

16. EXPERIENCE AND CAPABILITY

Bidder shall include the following information to describe the experience and capability of the company:

- 16.1 Number of years in operation.
- 16.2 Kind of company, i.e., corporation, partnership or sole proprietor. If corporation, please list names and addresses of the three (3) top corporate officers. If partnership, please list names of partners.
- 16.3 Gross revenues for past two (2) years.
- 16.4 **References from at least three (3) businesses with whom your company has completed similar type work.** Name, address, phone number and a contact person shall be stated for each reference. If possible, references should include at least one (1) contract of similar type, size and price of this contract.
- 16.5 Has your organization ever failed to complete any work awarded to it?
- 16.6 **These factors will be evaluated to determine your capability as a supplier. This information shall be submitted by all bidders.**

17. AWARD FACTORS

- 17.1 The City reserves the right to waive bid informalities, to reject any or all bids, and to award to the most responsible bidder making the most satisfying offer to the City.
- 17.2 Contract may be awarded to one (1) contractor, as is most advantageous to City, on an all-or-none basis.
- 17.3 The Contractor may not assign (subcontract) all or part of this contract to any other person, firm, or corporation without prior consent in writing by the City Manager or his designee.
- 17.4 **The contract may be awarded either to the lowest responsible bidder or to the bidder who provides goods or services at the best value for the municipality.**
- 17.5 In determining the best value for the municipality, the municipality may consider:
 - 17.5.1 the purchase price;
 - 17.5.2 the reputation of the bidder and of the bidder's goods or services;
 - 17.5.3 the quality of the bidder's goods or services;

- 17.5.4 the extent to which the goods or services meet the municipality's needs;
- 17.5.5 the bidder's past relationship with the municipality;
- 17.5.6 the impact on the ability of the municipality to comply with laws and rules relating to contracting with historically underutilized businesses and nonprofit organizations employing persons with disabilities;
- 17.5.7 the total long-term cost to the municipality to acquire the bidder's goods or services;
- 17.5.8 any relevant criteria specifically listed in the request for bids or proposals;

18. **BID TABULATION**

Bid Tabulation will be available on the Purchasing web page at <https://beaumonttexas.gov/departments/purchasing/bid-information/> following award of contract by City Council. Bid tabulations will not be provided via any other means. Furnishing of tabulations prior to Council action or by means other than City website is not authorized.

19. **LIABILITY**

THE CONTRACTOR AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS THE CITY OF BEAUMONT AND ITS OFFICERS, AGENTS, AND EMPLOYEES FROM ANY AND ALL CLAIMS, CAUSES OR ACTION, AND DAMAGES OF EVERY KIND, FOR INJURY TO OR DEATH OF ANY PERSON AND DAMAGES TO PROPERTY ARISING OUT OF OR IN CONNECTION WITH THE WORK DONE BY THE CONTRACTOR UNDER THIS CONTRACT, AND INCLUDING ACTS OR OMISSIONS OF THE CITY OF BEAUMONT OR ITS OFFICERS, AGENTS OR EMPLOYEES IN CONNECTION WITH SAID CONTRACT. THE PARTIES INTEND THIS INDEMNIFICATION TO APPLY REGARDLESS OF WHETHER THE CLAIM, DAMAGE, LOSS, OR EXPENSE IS CAUSED, OR ALLEGED TO BE CAUSED, IN WHOLE OR IN PART BY THE NEGLIGENCE OF THE SUBCONTRACTOR OR ANY INDEMNITEE.

Contractor waives all rights of recovery, and its insurers also waive all right of subrogation of damages against the City and its agents, officers, directors and employees for damages covered by the workers' compensation and employers liability or commercial umbrella or excess liability or business automobile coverage obtained by Contractor required in this Agreement, where permitted by law. This waiver must be stated on the City's approved Certificate of Insurance.

The fact that insurance is obtained by Contractor on behalf of City will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by City from Contractor or any third party will not be limited by the amount of the required insurance coverage.

20. INVOICES

- 20.1 Payment by City to Vendor shall be made in accordance with the requirements of Texas Government Code §2251.021.
- 20.2 Invoices must reference a Purchase Order number and the Department or Division for which goods or services are provided.
- 20.3 The Contractor shall submit an accurate invoice within five (5) working days from the date of delivery.
- 20.4 Invoices may be submitted via email to: invoices@beaumonttexas.gov
- 20.5 Invoices may be submitted via U.S. Mail to:

ATTN: Accounting Division
City of Beaumont
P. O. Box 3827
Beaumont, TX 77704-3827
- 20.6 Faxed invoices will not be accepted.

21. FUNDS FOR PAYMENT

Funds for payment are provided by the City of Beaumont budget approved by City Council for the current budget year only. The State of Texas statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. Obligations beyond the end of the current City of Beaumont fiscal year will be subject to budget approval.

22. CONTRACT TERMINATION

The City, besides all other rights or remedies it may have, shall have the right to terminate this agreement upon fifteen (15) days' written notice from the City Manager or his designee, of its election to do so, or if the successful bidder fails to perform the services or breaches this agreement, including the following:

- 22.1 By failing to pay insurance premiums, liens, claims or other charges.
- 22.2 By failing to pay any payments due the City, State, or Federal Government from the successful bidder or its principals, including, but not limited to, payments identified in this Agreement or any taxes, fees, assessments, or liens.
- 22.3 Upon the institution of voluntary or involuntary bankruptcy proceedings against the successful bidder or upon dissolution of the firm or business.
- 22.4 By violation of any provision or non-performance of the Agreement.
- 22.5 By death of the Contractor, or dissolution of the Contracting firm or business.
- 22.6 By violation of any provisions or non-performance of the Agreement.
- 22.7 By the abandonment of the premises or any portion thereof and discontinuance of the Contractor's operations, or any portion thereof. Should this occur, the City shall not be responsible for the custodial protection of merchandise, fixtures, or equipment abandoned, even though it is necessary for the City to remove the same for storage or disposal.

23. CONTACT INFORMATION

If any information is needed concerning specifications, please contact:

Terry Welch, Purchasing Manager
Purchasing Division / Finance Department
City of Beaumont

Physical Address:
801 Main St., Suite 315, Beaumont, TX 77701

Mailing Address:
P.O. Box 3827, Beaumont, TX 77704-3827

Phone # (409) 880-3107 ♦ Fax # (409) 880-3747

E-mail: terry.welch@beaumonttexas.gov

BID SPECIFICATIONS

1.0 INTENTION OF SPECIFICATIONS

It is the intention of the City of Beaumont to **contract for the services of a general contractor** to repair the light poles at the Athletic Complex #4 Softball Field, as described in the attached Technical Specifications.

2.0 CONTRACT TERM

See item 2, page 3.

3.0 PRICING

Price bid shall reflect total cost to complete the project as specified in the Technical Specifications within this document .

4.0 EQUIPMENT

Contractor shall provide all equipment used in the performance of this project in a fully operational condition, with no defective components, leaks, or mechanical failures. Equipment shall be maintained in fully operational state throughout the duration of each project. Routine equipment failures are a fact of life; however, contractor shall make every effort to ensure that any failures are quickly rectified, and that job progress is not unduly compromised due to equipment failures.

4.1 All provided equipment shall have all required safety equipment, warnings and placards in place and functional at all times.

4.2 Clean the job site after it is complete.

4.3 Failure by contractor to comply with the provisions of this contract, or excessive equipment failures, shall be grounds for immediate termination of this contract, at the sole discretion of the City.

5.0 The Contractor may not assign any portion of this agreement to any other person, firm, or corporation without prior consent, in writing, of the City Manager or his designee. The City's Representative must be notified of any subcontractors used in the performance of this contract.

6.0 The Contractor may not sell or assign all or part interest in activities to another party or parties without written approval of the City Manager or his designee of such sale or assignment. The City may require any records or financial statements necessary in its opinion to insure such sale or assignment will be in the best interest of the City.

7.0 INSURANCE REQUIREMENTS

Contractor shall at all times during the Contract maintain in full force and effect insurance as stated in Attachment "B".

- 7.1 A certificate of insurance, or a copy of the insurance policies shall be furnished to the City within five (5) days after the award of bid.
- 7.2 The City shall be named as additional insured on all policies. Should any insurance required by this Contract lapse, the Contractor shall immediately cease all operations as of the time and date of such lapse and shall not resume any operations until authorized in writing by the City. If the lapse period extends fifteen (15) days, the Contract shall automatically terminate and the Contractor shall be in breach of this Contract.

8.0 BID SECURITY

8.1 BID BOND -

Each bid shall be accompanied by a certified or cashier's check or approved Bond in an amount representing **Five Percent (5%)** of the total amount bid. Said check or bond shall be made payable to the City of Beaumont and shall be given as a Guarantee that the Bidder, if awarded the Work, will enter into an Agreement with the City, and will furnish the necessary insurance certificates and Performance Bond within Fourteen (14) days for award of Contract. In case of refusal or failure to enter into said Agreement, the check or Bid Bond, as the case may be, shall be forfeited to the City. If the Bidder elects to furnish as Bid Bond, it shall be on forms and by Sureties acceptable to the City.

8.2 PERFORMANCE BOND -

Within Ten (10) Days following contract award, the awarded Bidder shall furnish a Performance Bond in an amount representing one-hundred percent (100%) of the total bid amount. Said bond shall be payable to the City of Beaumont and shall be given as a guarantee that the Bidder shall satisfactorily complete all Work required by this Contract. In case of failure to perform all requirements of this contract, said Performance Bond shall be forfeited to the City. Bond shall be on a form and by a Surety acceptable to the City.

8.3 PAYMENT BOND -

Within Ten (10) Days following contract award, the awarded Bidder Shall furnish a Performance Bond in an amount representing one-hundred percent (100%) of the total bid amount. Said bond shall be payable to the City of Beaumont and shall be given as a

guarantee that the Bidder will satisfactorily pay for any materials, equipment, or other supplies, or for rental of same, used in connection with the performance of the work contracted to be done, or for amounts due under applicable State law for any work or labor thereon. In case of failure to pay all amounts owed by Contractor under the terms of this contract, said Payment Bond shall be forfeited to the City. Bond shall be on a form and by a Surety acceptable to the City.

8.4 **RETURN OF SECURITY**

Within Fourteen (14) calendar days after award of this contract, the City will return all bid securities accompanying each of the Bids that are not awarded. The bond of the awarded Bidder will be returned upon final execution of all contract documents relating to this bid.

Within Fourteen (14) calendar days following satisfactory completion of all Work required by this contract, and payment of final invoices, the City will return all Performance and payment securities to the awarded Bidder. Work required by this contract, and payment of final invoices, the City will return all Performance and payment securities to the awarded Bidder.

9.0 **WAGE REQUIREMENTS**

Required Wage Requirements information for construction bids is located at the end of this document.

WAGE RATE REQUIREMENTS - Attention is called to the fact that there must be paid on this project not less than the prevailing Highway-Heavy, Municipal and Utilities wage rates for Jefferson County or, as applicable, wage rates for Federally Funded Construction Projects. Wage rates as of **January 20, 2022** are set out in the contract documents, and are subject to revisions. It shall be the duty of the Contractor to keep posted on all the latest revisions. Also, qualifications being equal, citizens of the City of Beaumont shall be given preference in employment by any Contractor doing work for the City under contract. This is in accordance with Article XVII, Section 7, Page 54 of the Charter of the City of Beaumont, Texas, as adopted on December 6, 1947, which is as follows:

“Section 7 – Citizens Given Preference in Employment: Except as herein otherwise provided, qualifications being equal, citizens of Beaumont shall be given preference in employment by the City as well as by any contractor doing work for the City under contract, and such contractors shall pay the prevailing rate of wages paid for the class of work done; and qualifications, prices and quality of material being equal, citizens of Beaumont shall be given preference in awarding of all contracts over which the City has jurisdiction, provided that this section shall not interfere with the system of purchasing supplies for the various departments by competitive bidding.”

State law states a prevailing wage which can be determined by the local Government or use the Department of Labor statistics. Federal Law states that you must follow Davis Bacon requirements which also utilizes the Department of Labor statistics.

Wage Rates are taken from the following website: <https://www.wdol.gov/dba.aspx>

10.0 LIQUIDATED DAMAGES

It is understood and agreed between the parties that time is of the essence of this contract, and in case the Contractor shall fail to fully, entirely, and in conformity with the provisions of this contract, perform and complete said work within the time stated in the proposal with such allowances as herein before provided or within such further time as he may be allowed by the Owner, the Architect shall compute the number of days delinquency in said final and entire completion. It is hereby acknowledged by the Contractor that such delinquency caused additional overhead costs and expenses to the Owner.

It is hereby agreed between both parties to this contract that the amount of said damages are hereby ascertained and liquidated at the greater of Two Hundred and Fifty Dollars (\$250) per day of delay, or the actual measureable damages to the Owner including penalties, or other fees which may be charged to the Owner for failure to meet the time requirements. The Contractor hereby agrees to pay the stated sum to the owner for each and every day of delinquency

ATTACHMENT “A”

TECHNICAL SPECIFICATIONS AND DRAWINGS FOR:

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707**

Bid No. TF0122-12

NOTE:

**DRAWINGS will be loaded separately
on the City of Beaumont’s Bid Opportunities page at:**

<https://beaumonttexas.gov/departments/purchasing/bid-information/>

#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications

TECHNICAL SPECIFICATIONS

CIVIL, STRUCTURAL, & ELECTRICAL MANUAL



Athletic Complex-4 Light Pole Modifications

Beaumont, Texas



SIGMAENGINEERS
Innovative Solutions | Solid Designs

SEI Project No. 21-340
October, ## 2021
Set No. _____

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

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**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

DIVISION 1- GENERAL REQUIREMENTS

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, safety requirements, any applicable Owner furnished specifications and standards and Project Manual sections, apply to work of this section.

1.2 THE PROJECT

- | | | |
|----|-------------------|---|
| A. | Location of Site: | 950 Langham Rd, Complex-4
Beaumont, Texas 77707 |
| B. | Name of Project: | Complex-4 Light Pole Repairs |
| C. | Owner: | City of Beaumont |
| D. | Engineers: | Sigma Engineers, Inc.
4099 Calder Avenue
Beaumont, Texas 77706 |

1.3 SAFETY

Safety is of extreme importance while work is being done in and the around the project site. Contractor shall be familiar and fully adhere to OSHA regulations, safety and environmental requirements and the ordinances of City of Beaumont. Several existing underground conduits are within the project site. Contractor shall identify the utilities prior to start of work. Contractor is to submit a written plan for excavation, demolition, cutting, patching, work under ground and any work above ground and welding. Any work on existing utilities shall also have a written plan from the contractor and approved and coordinated with the City of Beaumont. Contractor shall provide a certified rigging and lifting plan prior to start of any work on the light poles.

1.4 DESCRIPTION OF WORK

The project is to restore the existing light poles. Contractor shall provide new foundation, modification to the pole structure and the lighting package include all new wires and controls. Damaged lights shall be replaced with in-kind new fixtures.

1.5 SITE CONDITIONS

- A. Prior to submitting proposal, visit site and become familiar with conditions under which work on this Contract will have to be performed.
- B. No allowance will be made on behalf of the Contractor for any error or negligence on his part, for by his submission of his proposal, the bidder represents that he is familiar with the conditions of the site.

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

1.6 SCHEDULE OF DRAWINGS

See section 01 95 00 for a complete list of drawings

1.7 MEASUREMENTS

- A. Before proceeding with work or ordering any materials, verify all measurements and be responsible for correctness of same.
- B. Submit to Engineer for consideration any differences found before proceeding with work.
- C. No extra charge or compensation will be allowed because of differences between actual dimensions and the measurements indicated on drawings.

1.8 CONTRACT FORMS

The Contract will be executed on latest version of standard City of Beaumont contract between the owner and contractor for a stipulated sum.

1.9 PERMITS & WINDSTORM CERTIFICATES

Contractor shall obtain and pay for all required permits for the city and other governing entities. Contractor shall furnish windstorm compliance certification signed by an engineer appointed by the State of Texas.

1.10 EXISTING ELECTRICAL AND UTILITIES

Contractor to visit job site and locate all utilities, such as pipelines, electrical lines, conduits, water and gas lines, data and communication lines and all other related items. All the above mentioned are to be marked and reviewed with the Owner. Disruption of utilities shall be avoided.

1.11 LIMITS OF WORK

The limits of this project are defined as the immediate area of work. Contractor to provide barricades on or at the vicinity of the battery limits. Confine operation of this contract to the immediate area of the battery limits. All work areas and access to site shall be restored to its original condition including the turf, landscaping and drainage. As a matter of importance, contractor shall keep city streets clean and free of construction debris and mud.

1.12 STANDARD, SPECIFICATIONS AND DRAWINGS

Contractor is to use the project drawings, specifications, and any owner furnished documents and enclosed standards for the project. If there is any conflict between these documents, it shall be brought to the Owner's attention at least 72 hours before bid time. The matter will be resolved by an addendum. Until complete resolution of the matter, contractor is instructed to use the most stringent method for bidding purposes.

1.13 SUBMITTALS

Four (4) copies of the shop drawings will be required. The Engineer will return two (2) copies with approval and/or comments. A color sample shall be submitted in four (4) original units of which the Engineer will return one copy with selection. The following items are to be submitted for approval before the items are delivered to the site.

**#21-340 City of Beaumont
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1.14 PROJECT WORK SCHEDULE

Contractor shall furnish a complete critical path schedule and submit to the owner and the engineer for approval. The schedule shall have details for all segments of work including submission of shop drawings, approval time, material ordering and receive of material and installation.

Schedule shall be updated on bi-weekly basis including the base line. Contractor shall also furnish a recovery schedule including the base line in case of any delays in the work.

1.15 INSURANCES

Contractor shall furnish all required insurances per limits stated in the contract with the City of Beaumont. Sigma Engineers Inc. SHALL be named as additionally insured on all insurances

Sigma Engineers Inc. SHALL be indemnified on all the indemnification certificate same as the City of Beaumont

END OF SECTION 01 10 00

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SECTION 01 21 00 – ALLOWANCES

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General Conditions and Supplementary Conditions and other Division 1 Project Manual sections, apply to work of this section.

1.2 GENERAL

- A. Purchase products under each allowance as directed by the Engineer.
- B. Include in the Contract Sum Cash Allowances to cover net cost of items purchased as directed and in accordance with provisions of the General Conditions.
 - 1. Net costs will include the following:
 - a) Cost of item.
 - b) Transportation costs to the job site.
 - c) All applicable taxes.
 - d) Other expenses contemplated to install item.
- C. Written authorization of the Engineer and approval of Owner must precede any expenditure of Cash Allowance amounts.
- D. If the net cost is more or less than the stated allowance, the Contract Sum will be adjusted by Change Order.

1.3 CASH ALLOWANCES

- A. Contingency Allowance:
 - 1. Include the sum of \$ 10,000.00 cash contingency

1.4 SELECTION OF PRODUCT

- A. Contractor's Responsibility:
 - 1. Provide Engineer with samples to make selections.
 - 2. Obtain proposals from suppliers when requested by Engineer.
 - 3. Notify Engineer of any effect anticipated by selection of product of construction schedule and/or Contract Sum.
 - 4. On notification of selection, enter into purchase agreement with designated supplier.
- B. Engineer's Responsibility:
 - 1. Provide contractor with required drawings and Project Manual.
 - 2. Make selections, designate products to be used.
 - 3. Notify Contractor, in writing, designating:
 - a) Product, model, and finish.
 - b) Accessories and attachments.
 - c) Supplier.
 - d) Provide change order showing costs.

END OF SECTION 01 21 00

SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions, and other Division 1 Project Manual sections, apply to work of this section.

1.2 COORDINATION

- A. Distribute to each entity performing work written instructions on required coordination activities, including notices and reports.
- B. Where work by separate entities requires off-site fabrication, which must be accurately and closely intermeshed, prepare coordination drawings to indicate how the work shown by separate shop drawings will be sequenced for installation.

1.3 SURVEYS AND RECORDS

- A. Carefully establish property lines from existing monuments.
- B. Establish lines and grades indicated on the drawings.
- C. Carefully establish benchmarks with references to levels and dimensions shown on drawings. Locate benchmarks at such locations as to insure them against any disturbance throughout construction period.

1.4 LIMITATIONS FOR USE OF SITE

- A. Administrate allocation of space equitably among entities needing access and space, to produce best overall efficiency in performance of total work of project.
- B. Schedule deliveries to minimize space and time requirements for storage of materials and equipment.

1.5 WORKMANSHIP STANDARDS

- A. Maintain procedures to ensure that tradesman performing work are skilled and knowledgeable in methods and craftsmanship needed to produce quality workmanship in completed work.
- B. Remove and replace work which does not comply with workmanship or its replacement.

1.6 INSPECTION, TESTS, REPORTS

- A. Inspection and testing services are intended to assist in determination of probable compliance of the work with requirements, but do not relieve Contractor of responsibility for those compliance or for fulfillment of requirements of contract documents.
- B. Engage the services of testing laboratory specializing in required services and complying with "Recommended Requirements for Independent Laboratory Qualifications" by ACIL.
- C. Afford reasonable access to agencies performing tests and inspections.
- D. Where tests or inspections are indicated as Owner's responsibility, Owner will engage the services of an independent testing agency.

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- E. Submit test/inspection reports, including agency's analysis of results and recommendations where applicable, to Owner.
- F. Submit reports to governing authorities where required or requested.

1.7 CLEANING AND PROTECTION

- A. Clean and protect work in progress and adjoining work.
- B. Apply suitable protective covering on newly installed work to ensure freedom from damage or deterioration.
- C. Adjust and lubricate operable components.
- D. Keep premises broom clean and after each operation remove rubbish from job site.

1.8 ESSENTIAL SERVICES

- A. Conduct operations to avoid interruption of essential services of the premises to the Owner.
- B. Make change over to water, gas, electricity, and sewer services expeditiously and plan so as not to leave the premises without these services.

1.9 PUBLIC UTILITIES PROTECTION

- A. Support and protect existing sewers, water, gas, electric, telephone and similar utility lines encountered during excavation operation.
- B. Immediately notify proper authorities and cooperate therewith to facilitate their work in providing additional protection or removal of utility lines.

1.10 SUSPENSION OF WORK

Whenever any part or all the work is suspended for any reason, close, cover, secure and protect work completed from injury or loss from any cause.

END OF SECTION 01 26 00

SECTION 01 32 00 – CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions, and other Division 1 Project Manual sections apply to work of this section.

1.2 COORDINATION

- A. Coordinate procedural timing and listing of reports required by provisions of contract documents.
- B. Maintain coordination and correlation between separate reports by updating at monthly intervals.
- C. Distribute reports to entities involved in the work including Engineer and Owner.
- D. Provide close coordination of progress schedule, schedule of values, listing of subcontracts, schedule of submittals, progress reports, and payment requests.

1.3 PROGRESS SCHEDULE

- A. Submit bar-chart type or other approved progress schedule within ten (10) days after date established for commencement of work.
- B. Indicate a time for each category of work.
- C. With submittal of schedule, submit a tabulation (by date) of submittals required during first 90 days of Construction Time. At Contractor's option, submittal dates may be shown on schedule, in lieu of being tabulated.
- D. Submit schedule of approximate payments that will be requested at the first of each month during the contract period.
- E. Post progress schedule at site in field office and keep updating as required.
- F. Pre-construction conference will be held prior to commencement of work to review responsibilities and personnel assignments.
- G. Prepare and submit to Engineer a progress report at first of each month.

1.4 PAYMENT REQUESTS

- A. Date for progress payments is as indicated in Owner-Contractor Agreement and Supplementary General Conditions.
- B. Use forms as provided by Engineer.
- C. Submit four (4) copies of each request for payment, complete with waivers of lien and similar attachments.
- D. See Section 01 77 00 for prerequisites to Substantial Completion and/or Final Completion.
- E. See Article 9 of General Conditions and Supplementary General Conditions.

1.5 CLEAN UP AND MATERIAL PROTECTION

- A. Various sections of the Project Manual refer to the neatness of operations and the protection and storage of materials. It is the obligation of the Contractor and Subcontractors to always maintain the work and operations at the site in neat order.

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- B. Neglect in maintaining a neat operation or the lack of proper protection and storage of materials will be cause for the omission of that portion of the work and/or materials from the monthly estimate and/or certificate.

END OF SECTION 01 32 00

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SECTION 01 33 00 – SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 Project Manual sections, apply to work of this section.

1.2 DESCRIPTION OF REQUIREMENTS

- A. Individual submittal requirements are noted in applicable sections for each unit of work.
- B. Refer to other sections and contract documents for requirements of administrative submittals.
- C. Work related submittals of this section are categorized as follows:
 - 1. Shop drawings: Specially prepared technical data for this project.
 - 2. Product data: Standard printed information on materials, products, or systems.
 - 3. Samples: Fabricated and non-fabricated physical examples of materials, products, and units of work.
 - 4. Miscellaneous Submittals:
 - a) Warranties
 - b) Maintenance agreements
 - c) Work records
 - d) Quality testing and certifying reports
 - e) Copies of Industry Standards
 - f) Record Drawings
 - g) Operating and Maintenance Manuals

1.3 SUBMITTAL REQUIREMENTS

- A. See Section 01 33 23 to coordinate submittals with schedules.
- B. Provide permanent marking on submittals as follows:
 - 1. Name of project.
 - 2. Date
 - 3. Contractor and Subcontractor
 - 4. Submittal name
- C. Package each submittal appropriately for transmittal and handling.
- D. Submittals received from sources other than through Contractor will be returned without action.
- E. Check and stamp all shop drawings and schedules prior to submittal to Engineer. Stamp to read: Contractor has checked the data submitted herewith and certifies that the submittals meet the Contract Requirements.
General Contractor _____
By _____ Date _____
- F. Do not use shop drawings in connection with work without appropriate final action markings by Engineer.
- G. Submit four (4) copies (five copies of mechanical, electrical, and plumbing) of shop drawings.
- H. Samples

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1. Include range sample (not less than 3 units) where variations may be expected.
 2. Include information to show generic description, source or product name, manufacturer, limitations, and compliance with standards.
 3. Samples are submitted for review and confirmation of color, pattern, texture, and kind by Engineer.
- I. Close-out Submittals
1. Record Documents - one copy.
 2. Maintenance/Operating Manuals - four (4) bound copies.
 3. Materials and Tools - Refer to individual sections for required quantities of spare parts, stock, tools, keys, and similar units to be submitted.

1.4 ACTION ON SUBMITTALS

- A. Where action is required, Engineer will review submittal, mark with "Action" and where possible, return as soon as possible.
- B. Where submittals are held for coordination, Contractor will be advised without delay.
- C. Return shop drawings and samples: Each submittal will be returned to the contractor stamped or marked by the Engineer as follows:
- REVIEWED - NOTE ANY COMMENTS:** The contractor is advised that fabrication, manufacture, and/or construction may proceed provided the work is in compliance with Engineer's notations and the contract documents.
- REVIEWED - CORRECT AND RESUBMIT:** The Contractor is advised that no work shall be fabricated, manufactured, and/or construction that the contractor shall make a resubmittal to the Engineer.

Copy of the Engineer's review stamp is shown below

SIGMA ENGINEERS, INC.

BEAUMONT, TEXAS

OUR REVIEW OF THE SUBMITTAL IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. OUR CHECKING DOES NOT INCLUDE REVIEW OF QUANTITIES, DIMENSIONS, WEIGHTS OR GAUGES, FABRICATION PROCESSES OR CONSTRUCTION METHOD. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFIRMING, VERIFYING AND CORRELATING DIMENSIONS AT THE JOB SITE; AND COORDINATION BETWEEN ALL TRADES AND SAFETY OF THE WORK. OUR CHECKING OF THESE DRAWINGS OR DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DEVIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS NOR FOR ERRORS OR OMISSION IN THE SHOP DRAWINGS AND SUBMITTALS.

____ NO EXCEPTIONS TAKEN ____ EXCEPTIONS TAKEN
____ SUBMIT SPECIFIED ITEM ____ REVISE / RESUBMIT

FOR THE FIRM _____ DATE _____

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- D. Do not order material, fabrication or equipment until submittal is returned stamped "Reviewed - Note any comments".
- E. Do not resubmit shop drawings unless Engineer so directs on his review stamp. If shop drawings are resubmitted without Engineer's instructions to do so, they will be returned to contractor without being rechecked and re-stamped by Engineer.
- F. Corrections: The contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections requested by the Engineer on previous submissions.
- G. Possession: Unless specifically stated otherwise, any sample may be retained until completion of the work. Such samples will be used to compare with materials and work installed on the project.

END OF SECTION 01 33 00

SECTION 01 33 23 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 Project Manual sections, apply to work of this section.

1.2 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of shop drawings by reference to sheet number and detail, schedule, or other appropriate identification of Contract Documents.
- B. Identify field dimensions; show relation to adjacent products or elements of the Work; show critical features.

1.3 PRODUCT DATA

- A. Submit only pages which are pertinent; mark each copy of standard printed data to specifically identify only pertinent products; reference each to Specification Section and Article number. Show standards, performance characteristics, and capacities; wiring and piping diagrams; controls; component parts; finishes; dimensions and required clearances.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.

1.4 SAMPLES

- A. Submit full range of manufacturer's standard finishes of the actual product, except when more restrictive requirement is specified, indicate colors, textures, and patterns for Engineer selection.
- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Label each sample with identification indicating Project name and number, and all other data necessary to connect the sample with the specific element of or location with the Work.
- D. Field Sample Location: acceptable finishes may be retained in the completed Work.
- E. Provide field samples of finishes at Project, at location acceptable to Engineer, or as required by individual Specifications section. Install each sample complete and finished.

1.5 CONTRACTOR'S EXAMINATION

- A. Review submittals prior to delivery to Engineer; verify quantities, field measurements, field construction criteria, assembly and installation requirements, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- B. Sign or initial each sheet of shop drawings and product data, and each sample label to certify coordination and compliance with requirements of

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Contract Documents. Notify Engineer in writing at time of submittal of any deviations from requirements of Contract Documents.

- C. Do not fabricate products or begin work which requires submittals until return of submittal with Engineer acceptance.

1.6 SUBMITTAL REQUIREMENTS

- A. Transmit submittals in such sequence to avoid delay in the Work.
- B. Provide 4 in. by 5 in. blank space on each submittal for contractor and Engineer stamps.
- C. Apply Contractor's stamp, signed or initialed, certifying to review, verification of products, field dimensions, quantities, field construction criteria, and coordination of information with requirements of Work and Contract Documents.
- D. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
 - 1. Finishes which involve Engineer selection of colors, textures, or patterns.
 - 2. Associated items which require correlation for efficient function or for installation.

1.7 SUBMITTAL QUANTITIES

- A. Submit one reproducible transparency, to be returned to Contractor, of shop drawings, plus one opaque reproduction which will be retained by Engineer.
- B. Submit number of copies of product data Contractor requires, plus one copy which will be retained by Engineer.
- C. Submit number of samples specified in individual Project Manual Sections.
- D. Submit under Engineer-accepted form transmittal letter. Identify Project by title and number. Identify Work and product by Project Manual section and Article number.

1.8 RESUBMITTALS

- A. Make resubmittals under procedures as noted for initial submittals; identify changes since previous submittal.

1.9 ENGINEER'S REVIEW

- A. Allow 10 days for Engineer's review of each submittal. Daily allowance is time in possession of Engineer and exclusive of delivery from and to Contractor and exclusive of resubmissions.
- B. Engineer's review is limited to aesthetics, engineer's design, and information contained in Contract Documents. Similarly, Consultant's review is limited to design relating to its specific field of expertise and its information contained in Contract Documents. Engineer's or Consultant's review is neither a verification of Contractor's examination nor a substitution of Contractor's responsibilities. Engineer or Consultant may inform Contractor of any conspicuous errors on a submittal without prejudice to being held harmless to Contractor's examinations and responsibilities.

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1.10 DISTRIBUTION

Duplicate as necessary and distribute reproductions of shop drawings, products data, manufacturer's instructions, and samples, which bear Engineer stamp of approval, to Record Documents file, other affected contractors, and other entities requiring information.

END OF SECTION 01 33 23

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SECTION 01 42 16 – DEFINITIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions, and other Division 1 Project Manual sections, apply to work of this section.

1.2 DEFINITIONS

A substantial amount of Project Manual language constitutes definitions for terms found in other contract documents, including the drawings which must be recognized as diagrammatic in nature and not complete descriptive of requirements indicated thereon. Certain terms used in the contract documents are defined generally in this article. Definitions and explanations of this section are not necessarily either complete or exclusive but are general for the work to extent not stated more explicitly in another provision of the contract documents.

- A. GENERAL REQUIREMENTS: The provisions or requirements of Division 1 sections. General Requirements apply to entire work of Contract and, where so indicated, to other elements of work which are included in the project.
- B. INDICATED: The term "indicated" is a cross-reference to details, notes, or schedules on the drawings, to other paragraphs or schedules in the Project Manual, and to similar means of recording requirements in the contract documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used in lieu of "indicated", it is for the purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.
- C. DIRECTED, REQUESTED, ETCETERAS: Where not otherwise explained, terms such as "directed", "requested", "authorized", "selected", "directed by Engineer", "requested by Engineer", etc. However, no such implied meaning will be interpreted to extend Engineer's responsibility into Contractor's area of construction supervision.
- D. APPROVE: Where used in conjunction with Engineer's response to submittals, requests, applications, inquiries, reports and claims by Contractor, the meaning of term "approved" will be held to limitations of Engineer's responsibilities and duties as noted in General and Supplementary Conditions. In no case will "approval" by Engineer be interpreted as a release of Contractor from responsibilities to fulfill requirements of the contract documents.
- E. FURNISH: Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.
- F. INSTALL: Except as otherwise defined in greater detail term "install" is used to describe operations at project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.
- G. PROVIDE: Except as otherwise defined in greater detail term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.

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- H. **INSTALLER:** The entity (person or firm) engaged by the Contractor or its subcontractor or sub-subcontractor for the performance of a particular unit of work at the project site, including installation, erection, application, and similar required operations. It is a general requirement that such entities (installers) be expert in operations they are engaged to perform.
- I. **TESTING LABORATORY:** An independent entity engaged to perform specified inspections or tests of the work, either at project site or elsewhere; and to report and (if required) interpret results of those inspections or tests.
- J. **ENGINEER:** The term used herein means the firm of Sigma Engineers, Inc., 4099 Calder Avenue, Beaumont, Texas 77706.

1.3 DRAWING SYMBOLS

Except as otherwise indicated, graphic symbols used on drawings are those symbols recognized in the construction industry for purposes indicated. Where not otherwise noted symbols are defined by "Architectural Graphic Standards", published by John Wiley & Sons, Inc., seventh edition, ANSI or ASHRAE.

1.4 INDUSTRY STANDARDS

Applicable standards of construction industry have same force and effect (and are made a part of contract documents by reference) as if copied directly into contract documents or as if published copies were bound herewith. Reference standards (referenced directly in contract documents or by governing regulations) have precedence over non-referenced standards which are recognized in industry for applicability to work.

- A. **Publication Dates:** Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of date of contract documents.
- B. **Copies of Standards:** Provide where needed for proper performance of the work; obtain directly from publication sources.
- C. **Abbreviations and Names:** Where acronyms or abbreviations are used in the Project Manual or other contract documents they are defined to mean the industry recognized name of trade association, standards, generating organization, governing authority or other entity applicable to context of text provision. Refer to "Encyclopedia of Associations", published by Gale Research Co., available in large libraries.

1.5 GOVERNING REGULATIONS/AUTHORITIES

The procedure followed by the Engineer has been to contact governing authorities where necessary to obtain information needed for the purpose of preparing the contract documents; recognizing that such information may or may not be of significance in relation to the Contractor's responsibilities for performing the work. Contact governing authorities directly for necessary information and decisions having a bearing on the performance of the work.

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1.6 SUBMITTALS

For the Owner's records, submit copies of permits, licenses certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

1.7 MANUFACTURER'S DIRECTIONS

- A. Apply, connect, erect, use, clean and condition in accord with manufacturer's printed directions all manufactured articles, materials and equipment supplied.
- B. Where reference is made to manufacturer's directions, submit copies of such directions to the Engineer.

1.8 OCCUPATIONAL SAFETY AND HEALTH ACT

Comply fully with all provisions of the Federal Occupational Safety and Health Act of 1970 and to all rules and regulations promulgated pursuant to this Act.

1.9 AMERICANS WITH DISABILITIES ACT

At the new addition portion of the project, comply fully with all provisions of Title III portion of Americans with Disabilities Act of 1990, unless noted otherwise.

1.10 The following is a list of abbreviations that may be used in the contract documents.

Acc.	Access
Adj.	Adjustable
AIA	American Institute of Architects
Alt.	Alternate
Anod.	Anodized
Asph.	Asphalt
Bldg.	Building
Blk.	Block
Cem.	Cement
C.I.	Cast Iron
Col.	Column
Conc.	Concrete
Const.	Construction
Det. or Det'l	Detail
Ea.	Each
El. or Elec.	Electrical
El. or Elev.	Elevation
Eng.	Engineer or Engineered
Ent.	Entry or Entrance
E.W.	Each Way
Exist.	Existing
Ext.	Exterior
Fin.	Finish
Ft.	Foot or Feet
Ga.	Gauge
Galv.	Galvanized

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Ht.	Height
I.D.	Inside Diameter
In.	Inch
Insul.	Insulation
Int.	Interior
Inv.	Invert
Jt.	Joint
Lat.	Lateral
L.L.H.	Long Leg Horizontal
L.L.V.	Long Leg Vertical
Max.	Maximum
Mech.	Mechanical
Met. or Mtl.	Metal
Mfg.	Manufacturing
Mfr. or Manuf.	Manufacturer
Min.	Minimum
N.I.C.	Not in Contract
O.C.	On Center
O.D.	Outside Diameter
O.H.	Overhead or Opposite Hand
Opng.	Opening
P.L.	Property Line
Pl.	Plate
Plbg.	Plumbing
Plywd.	Plywood
PVC	Polyvinylchloride
R. or Rad.	Radius
Ref.	Refer or Reference
Reinf.	Reinforcing or Reinforce
Schd.	Scheduled
Sec. or Sect.	Section
Sht.	Sheet
Sim.	Similar
Sp.	Space, Spaces, Spacing or Special
Sq.	Square
S.S. or St'l.	Stainless Steel
Sta.	Station or Stationery
St'l.	Steel
Struct.	Structural
Surf.	Surface
Sys. or Syst.	System
Vol.	Volume
W/	With
W/O	Without
W.W.M.	Welded Wire Mesh

END OF SECTION 01 42 16

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions, and other Division 1 Project Manual sections, apply to work of this section.

1.2 DESCRIPTION OF REQUIREMENTS

- A. Specific administrative and procedural minimum actions are noted as extensions of provisions in General Conditions and other contract documents.
- B. Nothing in this Section is intended to limit types and amounts of temporary work required, and no omission from this section will be recognized as an indication by Engineer that such temporary activity is not required for successful completion of work and compliance with requirements of contract documents.
- C. Provisions of this section are applicable to, but not limited to, utility services, construction facilities, security/provisions, and support facilities.

1.3 JOB CONDITIONS

- A. Establish and initiate use of each temporary facility at time first reasonably required for proper performance of work.
- B. Terminate use and remove facilities at earliest reasonable time when permanent facilities have replaced the need.
- C. Install, operate, maintain, and protect temporary facilities in a manner and at location which will be safe, sanitary, and protective of persons and property and free of deleterious effects.

PART 2 – PRODUCTS AND EXECUTION

2.1 TEMPORARY CONSTRUCTION FACILITIES

- A. General:
Plan with owner to furnish and pay, all water, electricity, and other utilities necessary for construction purposes.
- B. Water Distribution:
 - 1. Pipe to each work area and provide hose lengths sufficient to reach entire area of construction work with not less than ¾" hose size.
 - 2. Prevent freezing of water distribution system.
 - 3. Maintain 30 psi water pressure at outlets by temporary pumping where necessary.
- C. Enclosure:
 - 1. Provide temporary enclosure where required to ensure adequate workmanship and protection from weather and unsatisfactory ambient conditions for work.
 - 2. Provide fire retardant treated materials.
 - 3. Provide tarpaulins with UL label and flame spread rating of 15 or less.

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4. Provide translucent type where day lighting of enclosed space would be beneficial for workmanship and reduce use of temporary lighting.
- E. Electrical Power:
 1. Provide weatherproof, grounded, power distribution system sufficient to accommodate construction operations and startup of permanent electrically powered equipment.
 2. Provide overload protection.
 3. Locate multiple outlets at each floor spaced so entire area can be reached with power tools on a single 100-foot extension cord.
- F. Lighting:
 1. Provide sufficient temporary lighting to ensure proper workmanship by combined use of daylight, general lighting, and portable plug-in task lighting.
 2. Provide general lighting with local switching which will enable energy conservation during periods of varying activity.
 3. Provide uniformly spaced general lighting as required
- G. Roads:
 1. Develop sub-grade and sub-base of permanent roadways at earliest possible date to serve as temporary roads during construction.
 2. Maintain roads during construction.
 3. When no longer needed as temporary roadways, restore to conditions required by contract documents for permanent development.

2.2 SECURITY/PROTECTION PROVISIONS

- A. Fire Extinguishers:
 1. Provide types, sizes, numbers and at locations as would be reasonably effective in extinguishing fires during construction.
 2. Post warning and quick instructions at each extinguisher location.
 3. Post local fire department call number on each telephone instrument at project site.
- B. Site Enclosure:
 1. Provide barrier to prevent entrance of public to project construction area.
 2. Provide necessary gates for both personnel and vehicles.
- C. Building Enclosure:
 1. At earliest possible date, secure building against unauthorized entrance at times when personnel are not working.

2.3 TEMPORARY SUPPORT FACILITIES

- A. Contractor's Field Office:
 1. Provide adequate office space for field personnel plus workstation for incidental use by subcontractor's personnel.
 2. Provide tack board for posting notices and other information.
 3. Provide shelf or storage space for storing approved samples.
- B. Storage Buildings:

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1. Provide and maintain suitable watertight facilities to store materials subject to damage by the weather.
- C. Engineer's Field Office:
1. Provide space for Engineer's use that contains shelving, plan rack and plan table.
 2. Provide telephone for Engineer's use.
- D. Sanitary Facilities:
1. Provide ample sanitary toilet accommodations for workmen.
 2. Provide separate facilities for men and women when both sexes are working at project site.
 3. Always maintain facilities in sanitary conditions.
- E. Drinking Water:
1. Provide dispenser-type drinking water units at job site and in adequate number and location.
 2. Provide disposable cups and water receptacles.

END OF SECTION 01 50 00

SECTION 01 62 00 – PRODUCT OPTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Project Manual sections, apply to work of this section.

1.2 DESCRIPTION OF REQUIREMENTS

- A. Definitions: Definitions in this paragraph are not intended to negate the meaning of other terms used in contract documents including specialties, systems, structure, finishes, accessories, furnishings, and similar terms which are self-explanatory and have recognized meanings in the construction industry.
 - 1. Products: Defined as purchased items for incorporation into the work, whether purchased for the project or taken from Contractor's stock of previously purchased items.
 - 2. Materials: Defined as items which must be cut, shaped, worked, mixed, finished, refined, or fabricated, processed, installed, or applied to form units of work.
 - 3. Equipment: Defined as items with operational parts, whether motorized or manually operated, and particularly including items with service connections.
- B. Substitutions
 - 1. The requirements for substitutions do not apply to defined Contractor options on products and construction methods.
 - 2. Revisions to contract documents, where requested by Owner or Engineer are changes, not substitutions.
 - 3. Requested substitutions during bidding period which have been accepted prior to contract date, are included in contract documents and are not subject to requirements for substitutions as defined herein.
 - 4. Contractor's determination of and compliance with governing regulations and orders issued by governing authorities do not constitute substitutions, and do not constitute a basis for change orders, except as provided for in contract documents.
 - 5. Contractor's request for changes in products, materials, and methods of construction required by contract documents are considered request for substitution and are subject to requirements hereof.
 - 6. See Section SGC 6, Article 15, Subparagraph 15.2.7 for conditions related to substitutions requested after Bidding Period.
- C. **Standards**

Refer to Section 01090 - Definitions and Standards - for applicability of industry standards to products of project, and for acronyms used in text of specifications.

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1.3 QUALITY ASSURANCE

- A. Provide products, materials, and equipment of a single generic kind and from a single source.
- B. Where more than one choice is available as options for Contractor's selection of a product or material, select an option which is compatible with other products and materials already selected.
- C. Total compatibility among options is not assured by limitations within contract documents but must be provided by Contractor.
- D. Compatibility is a basic general requirement of product or material selections.

1.4 SUBMITTALS

On request for substitutions, submit four (4) copies (five copies of mechanical, electrical, and plumbing work) fully identified for product or method being replaced by substitution, including related specification section, and drawing numbers, and fully documented to show compliance with requirements for substitutions.

1.5 PRODUCT DELIVERY - STORAGE - HANDLING

- A. Deliver, handle and store products in accordance with manufacturer's recommendations and by methods and means which will prevent damage.
- B. Control delivery schedules to minimize long-term storage of products at site.

1.6 WARRANTIES

- A. Warranties are in several categories, including those of General Conditions, and including the following specific categories:
 - 1. Special Project Warranty: A warranty written and signed by Contractor for a defined portion of the work, and where required, countersigned by subcontractor, installer, manufacturer, etc., engaged by Contractor.
 - 2. Specified Product Warranty: A warranty which is required by contract documents to be provided for a manufactured product incorporated into the work.
 - 3. Coincidental Product Warranty: A warranty, which is not specifically required by contract documents, but which is available on a product incorporated into the work.
- B. General Limitations: It is recognized that specific warranties are intended primarily to protect Owner against failure of the work to perform as required, and against defective materials and workmanship regardless of source.
- C. Related Damages and Losses: In connection with Contractor's correction of warranted work which has failed, remove, and replace other work which has been damaged because of such failure, or to provide access for correction of warranted work.
- D. Reinstatement of Warranty: When work has failed and been replaced under terms of the warranty, reinstate warranty for a time starting on date of acceptance of corrected work to the date of original warranty would have expired had there been no failure.

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- E. Replacement Cost, Obligations: Costs of replacing failing warranted products is Contractor's obligation regardless whether Owner has already benefited from use through a portion of useful service life.
- F. Rejection of Warranties: Owner reserves the right to reject warranties submitted by Contractor which in opinion of Owner tend to detract from or confuse interpretation of requirements of contract documents.
- G. Contractor's Procurement Obligations: Do not purchase or subcontract for materials for project where warranties are required until it has been determined that entities required to countersign such commitments are willing to do so.
- H. Warranty Forms
 - 1. Where warranties are required, prepare a document to contain terms and appropriate identification ready for execution by required parties.
 - 2. Submit draft to Engineer for review prior to execution.

PART 2 - PRODUCTS

2.1 GENERAL PRODUCTS COMPLIANCE

- A. General: The compliance requirements for products may include generic, descriptive, proprietary, performance, prescriptive, compliance with standards, compliance with codes, conformance with graphic detail and other similar requirements.
- B. Procedures for Selecting Products:
Contractor's options for selecting products are as follows for various methods noted:
 - 1. Single Product/Manufacturer Name
 - a) Provide product indicated.
 - b) Where known that named product is not a feasible or acceptable selection, advise Engineer before proceeding.
 - 2. Two or More Product/Manufacturer Names
 - a) Provide one of the named products.
 - b) Do not provide an unnamed product.
 - c) If none of the named products comply with requirements, notify Engineer before proceeding.
 - 3. Or Equal: Where named products are accompanied by the term "or equal" comply with contract documents provisions concerning substitutions. See Article 2.02 this Section.
 - 4. Named
 - a) Defined to mean manufacturer's name for product as recorded in published product literature of latest issue as of date of contract documents.
 - b) Submit products of later or earlier model to Engineer for acceptance before proceeding.
 - 5. Standards, Codes and Regulations: Where products comply with imposed standards, codes, and regulations, selection is Contractor's option.

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6. Performance Requirements: Provide products which comply with specific performance indicated and which are recommended by Manufacturer for application indicated.
7. Prescriptive Requirements: Provide products which have been produced in accordance with prescriptive requirements, using specific ingredients, and comply with requirements for mixing, fabricating, curing, finishing, testing and similar operations in manufacturing process.
8. Visual Matching: Engineer's judgment is final whether product proposed matches an established sample satisfactorily.

2.2 SUBSTITUTIONS

- A. Specific materials, products and services have been defined to describe the effect or standard of quality desired.
- B. Generally, materials, products, or services other than those noted, which have been proven by evidence satisfactory to the Engineer to have the effect or standard of quality and design desired, will be acceptable as provided under the following conditions:
 1. During time allowed for preparation of bids, submit proposed substitutions for consideration of the Engineer at least 96 hours prior to the time and date of receiving proposals and provided its quality can be established for acceptance 48 hours prior to the time of receipt of proposals, so that such substitutions may be included in the final addenda.
 2. When revisions to contract documents are not required.
 3. Where required product cannot be provided within contract time, but not because of Contractor's failure to order product promptly.
 4. When required product cannot receive approval of governing authority.
 5. Where substantial advantage is afforded Owner, in cost or time.
- C. Work Related Submittals: Contractor's submittal of, and Engineer's acceptance of shop drawings, product data or samples which indicate work not complying with requirements of contract documents, does not constitute an acceptable and valid request for, nor acceptance of a substitution.

2.3 GENERAL PRODUCT REQUIREMENTS

- A. General
 1. Provide products which comply with requirements.
 2. Provide products which are undamaged and unused at time of installation.
 3. Provide products which are complete with trim, accessories, finish, safety guards and devices for complete, installation and for intended use.
- B. Do not permanently attach or imprint manufacturer's nameplates or trademarks or required labels on exposed surfaces of product which will be exposed to view either in occupied spaces or on exterior of the work.

END OF SECTION 01 62 00

SECTION 01 74 00- CLEANING AND WASTE MANAGEMENT

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions, and other Division 1 Project Manual sections, apply to work of this section.

1.2 SUMMARY

- A. Keep project site, the perimeter, and public properties free from debris and rubbish.
- B. At completion of work, remove waste materials, rubbish, tools, equipment, machinery, and surplus materials and clean all exposed surfaces. Leave project clean and ready for occupancy.
- C. Maintain project in accord with State and Local Safety, health standards.

1.3 RELATED WORK IN OTHER SECTIONS

Temporary Procession

1.4 GENERAL REQUIREMENTS

Cleaning materials: Use cleaning materials recommended by manufacturer of surface to be cleaned.

1.5 HAZARDS

- A. Store volatile waste and fuel in covered metal containers and remove from project site.
- B. Prevent accumulation of waste, which creates hazardous conditions. Provide adequate ventilation during use of paint, fuels, glues, and other gas emitting substances.

1.6 DISPOSAL

- A. Salvageable materials, including but not limited to, fill, rip rap, road materials, etc. Identified to be retained by Owner will be delivered to location designated. Remove other waste materials, debris and rubbish from site and legally dispose of.
- B. Do not burn or bury rubbish and waste materials on project site.
- C. Do not dispose of volatile waste such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
- D. Do not dispose of waste into streams or waterways.
- E. Do not dispose of excess concrete on the project site.

1.7 DUST ABATEMENT

Wet down materials and rubbish to lay dust and prevent it from blowing.

1.8 SITE CLEANING/APPEARANCE

- A. All walks drives and streets outside the construction fence shall be kept clean of dirt, mud, debris, building materials, etc. always.
- B. The contractor shall immediately clean any mud tracked out of the construction area by vehicles or equipment.
- C. The contractor shall keep the entire project site clean on daily basis.

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- D. The contractor shall always keep the grass/weeds cut within limits of construction. Minimum time interval during growing season is one week.
- E. Periodically inspect, tighten, and realign construction/tree protection fencing.

1.9 CONTAINERS AND HANDLING

- A. Provide onsite containers for collection of waste materials, debris, and trash.
- B. Do not drop or throw materials from heights.
- C. Do not use owner's waste containers.

1.10 FINISH WORK

- A. Vacuum clean and mop interior areas when ready to receive finish painting and continue vacuum cleaning on an as-needed basis until building is ready for beneficial occupancy or final acceptance.
- B. Clean all glass, mirrors, partitions, hardware, and remove all protective films and stickers.
- C. Clean all construction marks and pencil markings on walls and other surfaces.
- D. Wax all vinyl floors after completion of the installation and before owner's occupancy.

END OF SECTION 01 74 00

SECTION 01 77 00 – CLOSEOUT PROCEDURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Project Manual sections, apply to work of this section.

1.2 DESCRIPTION OF REQUIREMENTS

- A. Closeout is defined to include general requirements near end of contract time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner, and similar actions evidencing completion of work.
- B. Specific requirements for individual units of work are noted in Sections of Division 01 through 26.
- C. Time of closeout is directly related to “Substantial Completion” and may be either a single time or a series of time periods for individual parts of the work.
- D. That time variation is applicable to other provisions of this section.

1.3 PREREQUISITES TO SUBSTANTIAL COMPLETION

- A. General: Prior to requesting review of work for certification of substantial completion, complete the following:
 - 1. Provide and submit list of exceptions (items to be completed) to Engineer for review and such additions as Engineer may add, all to be recognized as exceptions to be included in Certificate of Substantial Completion.
 - 2. In progress payment request, show values of work 100% complete or 100% less value of work incomplete totaled and less retainage.
 - 3. Confirm with Engineer in the preparation of statement showing accounting of changes to contract sum.
 - 4. Coordinate with Engineer and advise Owner of pending insurance changeover requirements.
 - 5. Submit warranties, operating and maintenance manuals, record drawings and other documents required by the various sections of the Project Manual.
 - 6. Obtain and submit releases enabling Owner to have full and unrestricted use of the work, and access to services and utilities.
 - 7. Complete startup, testing of systems, including test and balance records and instruction of Owner’s operating/maintenance personnel
 - 8. Make final changeover of locks and deliver keys to Owner.
 - 9. Deliver tools, spare parts, extra material, etc., to Owner as required by the Contract Documents.
 - 10. Remove temporary facilities, services, tools, etc., from site and complete cleanup of project and touchup, of any marred surfaces.
 - 11. Provide evidence of payment to sub-contractors, suppliers, etc., as required by the Contract Documents.
- B. Review Procedures:
 - 1. Upon request Engineer will either review work or advise Contractor of prerequisites not fulfilled.

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2. Following initial review Engineer will either issue Certificate of Substantial Completion or advise Contractor of work to be performed prior to issuance of certificate.
3. Completed project review will form initial list of exceptions for final acceptance.

1.4 PREREQUISITES TO FINAL ACCEPTANCE

- A. General: Prior to requesting final review of work for certification of final acceptance and final payment, complete the following:
 1. Submit final request for payment together with supporting documentation.
 2. Submit list of exceptions, developed at Substantial Completion, with evidence that list of work is complete without exception.
 3. Verify that changeover of utilities has been completed.
 4. Submit the following documents:
 - a) Contractor's Affidavit of Payment of Debts and Claims
 - b) Contractor's Affidavit of Release of Liens
 - c) Consent of Surety to Final Payment
 - d) Certificate of Release and Waiver of Lien
 5. Submit final liquidated damages settlement statement, if any, for Owner's acceptance.
 6. Revise and submit evidence of continuing insurance coverage, if any, complying with insurance requirements.
 7. Submit evidence of payment in full to sub-contractors, suppliers, material men, etc.
- B. Final Review Procedure:
 1. Engineer will review work when notified by Contractor that all work is completed including list of exceptions, except items delayed because of acceptable circumstances.
 2. After review, Engineer will either issue Certificate of Final Acceptance or notify Contractor of deficiencies.
 3. Procedure repeated until final acceptance.

1.5 RECORD DOCUMENT SUBMITTALS

- A. Record Drawings
 1. Do not use for construction purposes.
 2. Keep at job site in a secure place.
 3. Show location of actual installation of items that vary from work as originally shown.
 4. Organize record drawings into sets, bind and print titles, date, and other identification on covers.
 5. Show changes with red erasable pencil.
- B. Maintenance Manuals

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1. Bind each manual in heavy-duty 2", 3 ring vinyl covered binder with pocket folders for folded information.
2. Properly identify on both front and spine of binders and thoroughly index contents.
3. Include emergency instructions, spare parts listing warranties, wiring diagrams, recommended turn around cycles, inspection procedures, shop drawings, product data and similar information.

PART 2 – PRODUCTS

PART 3 – EXECUTION

3.1 CLOSE-OUT PROCEDURE

- A. Arrange for each installer of work requiring maintenance or operation to meet with Owner's personnel to provide basic instructions for proper maintenance and operation of work.
- B. Provide manufacturer's representatives where installers are not expert in required procedures.
- C. Review maintenance manuals, record documentation, tools spare parts, lubricants, fuels, identification system, control sequence, hazards, and similar procedures.
- D. For operational equipment demonstrate start up, shut down, emergency operations etc.
- E. Review maintenance and operations in relation with warranties, agreements to maintain bonds, and similar continuing commitments.
- F. See Division 15 and 16.

3.2 FINAL CLEANING

- A. Special cleaning for specific work is specified in Sections of Divisions 22 through 26.
- B. General cleaning during progress of work is noted in General Conditions.
- C. Comply with manufacturer's instructions for cleaning operations.
- D. Comply with safety standards governing regulations for cleaning operations.
- E. Do not burn waste materials at site without proper authorization.
- F. Do not bury debris or excess material on Owner's property.
- G. Do not discharge volatile, harmful, or dangerous materials into drainage system.
- H. Remove waste material from site and dispose in lawful manner.

END OF SECTION 01 77 00

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SECTION 01 78 36 – WARRANTIES

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions, and other Division 1 Project Manual sections, apply to work of this section.

1.2 SUMMARY

- A. The contractor and each subcontractor shall submit to the Owner a written guarantee, prior to release of final payment on a form approved by the Architect, for the workmanship, materials, and equipment as stated below or for a minimum of one (1) year period.
- B. All guarantees, including extended guarantees specified hereinafter, shall be addressed to the Owner by name, and submitted to owner in loose leaf binders, properly labeled.
- C. Warranties/guarantees shall include parts, labor, and all other costs required to repair and/or replace items that may malfunction during the Warranty/Guarantee period.
- D. All guarantees shall be for period specified, commencing on date of acceptance of the work by the Owner.

Until receipt of guarantees, final inspection will not be conducted, nor final payment released.

END OF SECTION 01 78 36

SECTION 01 95 00 – DRAWINGS, SHOP DRAWINGS AND SUBMITTALS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 SCHEDULE OF DRAWINGS & SUBMITTALS

COV-1 COVER SHEET

Structural

C1 SITE PLAN

C2 LIGHT POLE FOUNDATION AND DETAILS

1.3 PROJECT SPECIFIC REQUIRED SUBMITTALS

Four (4) copies of the shop drawings will be required. The Engineer will return two (2) copies with approval and/or comments. A color sample shall be submitted in four (4) original units of which the Engineer will return one copy with selection. The following items are to be submitted for approval before the items are delivered to the site:

- A. Shop Drawings for:
 - 1. Reinforcing Steel
 - 2. Structural and Miscellaneous Steel
- B. Submittals for approval and color selection:
 - 1. Concrete Mix
 - 2. Select Fill
 - 3. Installation procedure for structural & Misc. steel
 - 4. Joint sealers
 - 5. Electrical Gear and Lighting & Devices
 - 6. Lighting Fixtures

END OF SECTION 01 95 00

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DIVISION 2 – SITE WORK

SECTION 02 50 00 – SITE REMEDIATION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DESCRIPTION OF WORK

Site remediation includes, but is not limited to:

- A. Protection of trees to remain.
- B. Removal of trees and other vegetation.
- C. Stripping topsoil.
- D. Clearing and grubbing.

1.3 JOB CONDITIONS

- A. Protect trees against unnecessary cutting, breaking, or skinning of roots, skinning or bruising of bark.
- B. Provide 4'0" high lumber barricade 2'0" from face of all present trees shown to remain.
- C. Do not smother trees by stockpiling construction or excavated materials within drip lines.
- D. Eliminate unnecessary foot or vehicular traffic within drip line of trees.
- E. Do not park vehicles within drip line.
- F. Provide temporary guards to protect trees to be left standing.
- G. Coat cut faces of roots 1-1/2" or larger with emulsified asphalt or other acceptable coating.
- H. Temporarily cover exposed roots with wet burlap and cover with earth as soon as possible.

PART 2- EXECUTION

2.1 SITE CLEARING

- A. General
 - 1. Remove vegetation or obstructions interfering with installation of new construction.
 - 2. Carefully cut roots and branches of trees indicated to be left standing.
- B. Fill Material:
 - 1. Fill depressions caused by clearing work with soil having plasticity index of 12 maximum.
 - 2. Place fill material in horizontal layers not to exceed 8" loose depth.
 - 3. Compact fill to density equal to original ground.
 - 4. See mechanical, electrical, and plumbing drawings and specifications for removal of items under those sections.

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2.2 DISPOSAL OF MATERIALS

- A. Burning is not permitted on Owner's property.
- B. Remove waste material from site.

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SECTION 02 50 50 - SHORING AND BRACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DESCRIPTION OF WORK

- A. Extent of shoring and bracing is indicated on drawings and includes, but is not limited to, the following:
 - 1. Shoring and bracing necessary to protect existing buildings, streets, walks, utilities and other improvements and excavation against loss of ground or caving embankments.
 - 2. Maintenance of shoring and bracing.
 - 3. Removal of shoring and bracing.
- B. Building excavation is specified in another Division 2 section.

1.3 QUALITY ASSURANCE

- A. Assign supervision of shoring and bracing to a qualified foundation consultant.
- B. Comply with local codes and ordinances of governing authorities having jurisdiction.
- C. Provide design drawings for shoring and bracing prepared and sealed by a Registered Professional Engineer.

1.4 JOB CONDITIONS

- A. Before starting work, check and verify governing dimensions and elevations.
- B. Take photographs, as directed, recording any prior settlement, or cracking of structures, pavements, and other improvements.
- C. Prepare a list of such damages verified by dated photographs and signed by persons conducting investigation.
- D. Survey adjacent structures establishing exact elevation at fixed points to act as benchmarks.
- E. Locate datum level used to establish benchmark at sufficient distance so as not to be affected by movement resulting from excavation operations.
- F. Resurvey benchmarks weekly and maintain accurate log of elevations for comparison with original elevations.
- G. Notify Engineer if changes in elevation occur, or if cracks, sags, or other damage is evident.

1.5 UTILITIES

Protect existing sewer, water, gas, electricity, and other utility services.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide suitable shoring and bracing materials which will support loads imposed.

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- B. Materials need not be new but should be in serviceable condition.

PART 3 – EXECUTION

3.1 SHORING

- A. Protect the site from caving and unacceptable soil movement.
- B. Locate system of shoring to clear permanent construction and to permit necessary operations to be performed.
- C. Provide shoring system adequately anchored and braced to resist earth movement and hydrostatic pressures.
- D. Shoring system retaining earth on which the support or stability of existing structures is dependent must be removed only after back filling operation is performed.

3.2 BRACING

- A. Locate bracing to allow construction of permanent work.
- B. Do not relocate bracing until new bracing is in place.
- C. Install internal bracing to prevent spreading or distortion of braced frames.

3.3 REMOVAL

- A. Remove shoring, sheeting, and bracing in stages to avoid disturbance of underlying soils and damage to structures, pavements, and utilities.
- B. Repair or replace adjacent work damaged or displaced through the installation or removal of shoring and bracing.

END OF SECTION 02 50 50

DIVISION 3 – CONCRETE

SECTION 03 10 00 - CONCRETE FORMWORK AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DESCRIPTION OF WORK

- A. Erect formwork to sizes and shapes to produce concrete work shown on plans.
- B. Cooperate with other crafts having items requiring embedment in concrete.

PART 2 - PRODUCTS

2.1 FORMS

- A. Wood: Use selected material to obtain required finishes.
- B. Metal: Free of warps, defect, rust, scale, and other imperfections that may mar the finish of concrete.
- C. Earth forms upon approval by Engineer only.

2.2 ACCESSORIES

- A. Carton Forms
 - 1. Heavy duty corrugated fiberboard impregnated with asphalt.
 - 2. Provide with end closures.
 - 3. Store, assemble, place, and protect as directed by manufacturer.
 - 4. See Drawings for size and location.
- B. Form Coating: A.C. Horn's "Form film" or equal.
- C. Form Ties:
 - 1. Steel with break-back points of 1" or more.
 - 2. Strength to withstand concrete form pressures.
 - 3. Removable type for exposed surfaces.
- D. Chamfers: Wood, metal, PVC, or rubber fabricated to produce uniform smooth lines and tight joints.
- E. Control Joints:
 - 1. Anchorite - Jahn Joint
 - 2. Medco - Screed Joint
 - 3. Greenstreak - Screed Joint
- F. Expansion Joints - Paving and Walks - 1/2" Burke Pre-molded Asphalt fiber with Greenstreak 941-1/2" expansion board cap. Insert 3/8" round reinforcing bar into cap void (temporary) to hold alignment until concrete takes initial set.

PART 3 - EXECUTION

3.1 FORM DESIGN AND CONSTRUCTION

- A. Construct to slopes, lines and dimensions shown.
- B. Erect plumb, straight and sufficiently tight to prevent leakage.
- C. Forms, ties, shoring and bracing designed and construction to safely

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withstand the weight and pressure of the fresh concrete, construction loads, wind loads, etc., without deflection or movement.

- D. Design and construction of formwork is the sole responsibility of Contractor.
- E. Construct forms for beams, girders, lintels so that sides are removable without disturbing bottom of form or its supports.
- F. Apply form coating prior to placement of reinforcing.
- G. Provide access openings to clean and inspect forms and reinforcement.
- H. Form accurately openings, depressions, chases, etc., as required by the drawings or other trades.
- I. Clean form surfaces thoroughly just before placing concrete.

3.2 INSTALLATION OF EMBEDDED ITEMS

- A. Place and secure all anchors, inserts, hangers, sleeves, bolts, etc.
- B. Use wood templates for placing structural steel anchor bolts.
- C. Set small bolts and anchorage items in fresh concrete where possible.
- D. Cooperate with other trades having items requiring embedment in concrete.
- E. Place conduits as near the center of slabs as possible.
- F. Do not encase aluminum conduit in concrete.
- G. Place items so that they do not interfere with structure.

3.3 CONSTRUCTION JOINT (BEAMS)

- A. Locate at center of spans or as shown on drawings.
- B. Extend reinforcing through construction joint.
- C. Place 4, 6" x 3'0" additional bars diagonally across joint.
- D. Provide 2, 2 x 4 formed vertical keys in beam.
- E. Form joints with bulkheads fitted to reinforcement to prevent leakage.

3.4 EXPANSION JOINTS

- A. Provide where walks and other slabs abut structural members.
- B. Provide in walks, drives and parking areas.
- C. Provide #4 x 2'-0" slip dowel reinforcing as follows:
 - 1. Three (3) in curbs.
 - 2. Spaced at 18" on center in walk.
 - 3. Spaced at 12" on center in drives and parking areas.
- D. After concrete has taken full set, expansion cap to be removed and void filled with sealant.
- E. Expansion and Contraction Joints
 - 1. Expansion and control joints shall be located where shown on drawings.
 - 2. Joint Fillers:
 - a. Use Key Load transfer boards as manufactured by Marine Lumber Co., of Houston, Texas with 1" removable top strip and 3/4" diameter x 20" long smooth steel dowels at 22" on center. (Verify dowel length on drawings).
 - b. Remove top strip and seal joint with gray "Sonneborn" SL1 self- leveling horizontal joint sealant.
 - c. Installation to be in accordance with manufacturers printed instructions.

3.5 CONSTRUCTION JOINTS (SLABS)

- A. Provide control joints for each 2500 square feet of slab area maximum: 50

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feet maximum between joints or as shown on plans.

- B. Anchor with #4 x 24" bars or manufacturers approved stakes at 2'-6" on center maximum.
- C. Provide #4 x 2'-0" slip dowels
- D. See drawings for other specific locations.
- E. Not required for exterior drives and paved areas.

3.6 CONTROL JOINTS

- A. Provide at 5'-0" O.C. maximum in walks.
- B. Provide as shown on plans in drives.

3.7 SCREEDS FOR SLABS ON GRADE

- A. Use of pin screed is prohibited.
- B. Provide continuous pipe screed mounted on steel chairs or wood stakes if wood stakes are used remove from concrete after concrete has been leveled.

3.8 REMOVAL OF FORMS

- A. Do not remove forms from columns, walls, and beams for at least 48 hours after placement of concrete.
- B. Do not remove soffit forms of beams and slabs for at least 7 days after placement of concrete, then re-shore.
- C. Time and safe practice of removing forms, shoring and re-shoring is the responsibility of the Contractor.
- D. Remove forms in a manner so as not to damage concrete surfaces or corners.
- E. Remove forms from concrete below grade.

END OF SECTION 03 10 00

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SECTION 03 20 00 - CONCRETE REINFORCING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DETAILING AND FABRICATION

Conform to the following:

- A. American Concrete Institute Bulletins ACI 315 and 318.
- B. American Concrete Institute Detailing Manual.
- C. Details and notes on drawings.
- D. Project Manual and Shop Drawings.

1.3 SHOP DRAWINGS

- A. Submit five (5) copies showing lengths, bending, placing, and all accessories.
- B. Obtain the Engineers' review before proceeding with work.

PART 2 - PRODUCTS

2.1 STEEL BARS

- A. New deformed billet steel, ASTM designation A-305.
- B. Clean, free of rust, scale, or oil.
- C. 1/4" diameter smooth: ASTM designation A-306.
- D. No. 3, ASTM designation A615 grade 70.
- E. No. 4 and larger, ASTM designation A615 grade 60.
- F. Expansion joint dowels: 3/4" diameter plain steel bars with sawn end and endocarp.
- G. At the Contractor's option, bars for slabs on grade, walks, drives and curb: Grade 40.

2.2 WELDED WIRE FABRIC

- A. ASTM designation A185.
- B. Size and spacing as shown on drawings.
- C. Wire mesh for sidewalks to be 6 x 6 W6 x W6.

2.3 STEEL ACCESSORIES

- A. Standard bar chairs and spacers for all slabs and beams above grade, galvanized where soffit is exposed in the completed building.
- B. Precast concrete supports for bottom bars in concrete on grade, including drives and parking, approximately 3" x 3" x height required with casts in tie wire.
- C. Supports for top reinforcing steel in slabs on grade:
 - 1. 3" x 6" x 20-gauge galvanized bar chairs.
 - 2. Depth of chair to provide 1" concrete coverage.
- D. Tie Wire: 16-gauge annealed iron wire.

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- E. Other accessories in accordance with the American Concrete Institute detailing manual.
- F. Bricks or broken concrete are to be not permitted to support reinforcing in any concrete work.

PART 3 - EXECUTION

3.1 PLACEMENT OF REINFORCING STEEL

- A. Place to obtain at least minimum coverage for concrete protection.
- B. Arrange, space, and secure tie bars and bar supports to hold reinforcement in position during placement of concrete.
- C. Clean reinforcement of concrete splash from previous castings.
- D. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars".

3.2 PLACEMENT OF WELDED WIRE FABRIC

- A. Place continuously in areas shown on drawings.
- B. Extent to within 4" of concrete edges.
- C. Lap not less than spacing of wires parallel to lap.
- D. Position for proper concrete coverage.
- E. Offset end laps in adjacent widths.
- F. Lace all splices with wire.
- G. Install in toppings as required on drawings including fill for metal stair pans.

3.3 MASONRY LINTELS

Provide reinforcing steel for lintels in concrete masonry walls as scheduled on drawings.

END OF SECTION 03 20 00

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DESCRIPTION OF WORK

- A. Extent of concrete work shown on drawings.
- B. General lightweight structural concrete will be used for upper floor and roof slabs.

1.3 QUALITY CONTROL

- A. Comply with provisions of American Concrete Institute 301 "Specifications for Structural Concrete for Buildings".
- B. Employ, at Contractor's expense, a testing laboratory acceptable to Engineer to perform material evaluation tests and to design concrete mixes.
- C. Retesting of rejected materials and installed work to be at Contractor's expense.

1.4 SUBMITTALS

- A. Submit manufacturer's product data with application and installation instruction for materials, including admixtures, patching compounds, curing compounds and others as requested by Engineer.
- B. Submit laboratory test reports for concrete materials and mix design test as specified.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Portland Cement:
 - 1. ASTM Designation C150, Type 1.
 - 2. Use one brand of cement throughout project.
- B. Aggregates:
 - 1. ASTM Designation C33 (normal weight).
 - 2. Provide aggregates from a single source for exposed concrete.
 - 3. Fine aggregates: Clean, hard, natural sand.
 - 4. Coarse aggregates: Hard, durable, uncoated, and maximum size in accordance with the following:
 - a) 100% passing 1-1/2" screen, 60% passing 1" screen for columns, walls, beams and slabs.
 - b) Graded 3/8" down for concrete topping.
 - 5. ASTM Designation C330 (lightweight).

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C. Water: Potable

D. Admixtures:

1. Pozzolith (Retarder-Accelerator) Densifier as manufactured by Masterbuilders.
2. Air Entraining Agent: Neutralized Vinsol Resin Solution conforming to ASTM Designation C260.

E. Curing Agent: Hydrocide as manufactured by Sonneborn Building Products.

F. Membrane: 6 mil. polyethylene and tape.

2.2 MIXING AND PROPORTIONING

A. Quality:

1. Footings and beams:
 - a) 3000 pos. compressive strength concrete.
 - b) 480 pounds of cement per cubic yard minimum.
 - c) 0.58 water/cement ratio minimum.
2. All other concrete:
 - a) 2500 pos. compressive strength concrete.
 - b) 425 pounds of cement per cubic yard minimum.
 - c) 0.65 water/cement ratio minimum.

B. Admixtures:

1. (Retarder-Accelerator) Densifier for all concrete as required by weather.
2. Air-entrainer admixture at rate that concrete at point of placement has air content not less than 2% or more than 4% air.
3. Slump limits:
 - a) Ramps and sloping surfaces: not more than 3".
 - b) Foundation systems: not less than 1" and more than 3".
 - c) All other concrete: not less than 2" and more than 4".

2.3 CONCRETE MIXING

A. Ready Mixed Concrete:

1. Conform to ASTM Designation C-94.
2. Add no water while in transit.
3. When air temperature is between 85° F (30° C) and 90 ° F (32° C) reduce mixing and delivery time from 1-1/2 hours to 75 minutes.
4. When air temperature is above 90 ° F (32° C) reducing mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 CONCRETE PLACEMENT

A. General:

1. Notify Engineer and testing laboratory at least 24 hours prior to date of concrete placement.
2. Do not place concrete during rain or when temperature is 45° F or less.
3. Make suitable arrangements for temporary heat if freezing conditions occur during curing period.
4. Protect adjacent areas and surfaces from concrete splatter.

B. Handling Concrete:

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1. Use methods that cause no separation or loss of ingredients.
2. If wheeled carriers are used, provide adequate runways which rest on the structure or fill and in no case rest on reinforcing or steel centering.
- C. Placing Concrete:
 1. Use methods that cause no separation of concrete.
 2. Place in uniform layers, approximately level and do not exceed 18" vertically.
 3. Use mechanical vibrators with sufficient duration and intensity to consolidate and densify formed surfaces.
 4. Produce uniform, even dense surfaces free of voids, honeycombs, air pockets, unscheduled joints and suitable for type finish indicated.
 5. Place concrete for drilled footings immediately after excavation on undisturbed soil.
 6. Place footings and piers monolithically.
 7. Place concrete slab in continuous operation within limits of construction or control joints.
 8. Bring slabs to proper levels with use of steel trussed straightedge.
 9. Use full float and darbies to smooth surface, free of humps and hollows.
 10. Do not use 2x wood straightedges to screed off slabs.
 11. Do not pin type screeds (see Section 03 10 00).

3.2 FINISHES OF FORMED SURFACES

- A. Rough Form Finish: For formed surfaces not exposed to view:
 1. Surface having texture imparted by form facing material.
 2. Repair and patch tie holes and defective area.
 3. Fins and other projections exceeding 1/4" in height rubbed down or chipped off.
- B. Smooth Form Finish: For formed surfaces exposed to view or that are covered with a coating such as waterproofing, damp proofing, paint, etc.:
 1. Surface obtained with selected form facing material arranged orderly and symmetrically with a minimum of seams.
 2. Repair and patch defective areas with fins or other projections completely removed and smoothed.
- C. Smooth Rubbed Finish:
 1. Rub exposed surfaces with carborundum stone.
 2. Rub within 24 hours of form removal.
 3. Moisten and rub surfaces to remove defects to produce a uniform color and texture.
 4. Do not apply cement grout other than that created by the rubbing process.
- D. Grout Cleaned Finish: Apply this finish to surfaces which have received smooth form finish.
 1. Combine one-part cement (a blend of standard Portland and white Portland cement so that final color of dry grout will match adjacent surfaces) and 1-1/2 parts fine sand by volume, mix with water to consistency of thick paint.
 2. Thoroughly wet surfaces and apply grout to coat surfaces and fill small holes.

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3. Remove excess grout by scraping and rubbing with clean burlap.
4. Keep damp by fog spray for 36 hours after rubbing.

3.3 MONOLITHIC SLAB FINISHES

- A. Scratch Finish: For slab surfaces that are to receive topping, mud set tile, cement terrazzo, etc.
 1. Plane surface to a tolerance not exceeding 1/4" in 2'.
 2. Slope surfaces to drains where required.
 3. After leveling, roughen surface before final set with rake.
- B. Trowel Finish: For slab surface exposed to view or receiving coverings or paint:
 1. Machine trowel to extent practical.
 2. Hand trowel to produce hard, dense, smooth surface free of trowel marks.
 3. Surface plane tolerance not exceeding 1/8" in 10' when tested with 10' straight edge.
 4. Grind smooth defects which would telegraph through applied floor covering system.
- C. Non-Slip Broom Finish: For walks, ramps and exterior areas noted:
 1. Immediately after trowel finishes, slightly roughen surface with fiber bristle broom.
 2. Broom perpendicular to main traffic route.
- D. Non-slip Aggregate Finish: For steps, landings, ramps, and areas noted:
 1. After float finish and before starting trowel finish, spread 25 pounds of dampened non-slip aggregate per 100 square feet.
 2. Tamp aggregate flush with surface using steel trowel.
 3. Apply steel trowel finish.
 4. After curing, lightly work surface with a steel wire brush; or an abrasive stone, and water to expose non-slip aggregate.
- E. Chemical-Hardener Finish: For all interior concrete floors except as noted otherwise:
 1. Apply chemical hardener after complete curing and drying of the concrete floor.
 2. Dilute hardener with water and apply to floor in 3 coats allowing 24 hours drying between coats:
 - a) First coat: 1/3 strength.
 - b) Second coat: 1/2 strength.
 - c) Third coat: 2/3 strength.
 3. Apply coats evenly.

3.4 CONCRETE CURING AND PROTECTION

- A. General:
 1. Start initial curing as soon as free water has disappeared from concrete surface.
 2. Keep moist continuously for not less than 72 hours.
 3. Continue curing for at least 7 days in accordance with ACI 301 procedures.
- B. Curing Methods:
 1. Moisture Cover Curing:
 - a) Cover concrete with moisture retaining cover.
 - b) Place in widest practicable width.
 - c) Lap side and end joints at least 3" and seal with waterproof

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- tape or adhesive.
- d) Repair any holes or tears during curing period.

2. Membrane Curing:

- a) Apply membrane-forming curing compound as soon as finishing operations are complete.
- b) Apply in accordance with manufacturer's directions.
- c) Use of chemical agent by approval of Engineer. (Do not use at thin set ceramic tile areas.)

3.5 CONCRETE SURFACE REPAIRS

- A. Repair and patch defective areas immediately after removing forms.
- B. Dampen and brush coat defective areas with neat cement grout.
- C. Blend white and standard Portland cement so that when dry patch will match color of surrounding concrete.
- D. Use epoxy-based mortar for structural repairs where directed by Engineer.

3.6 QUALITY CONTROL TESTING

- A. Slump: ASTM C-143, one test for each set of compressive strength test specimens.
- B. Compression Test:
 - 1. Three (3) cylinders for each twenty (20) cubic yards of concrete.
 - 2. Test one (1) cylinder at seven (7) days, one (1) cylinder at twenty-eight (28) days and retain one (1) cylinder for later testing if required.
- C. Send copies of test results to the Engineer.
- D. Test reports to include the following:
 - 1. Project identification name.
 - 2. Date of concrete placement.
 - 3. Name of testing service.
 - 5. Concrete type and class.
 - 6. Location of concrete batch in structure.
 - 7. Design compressive strength of concrete.
 - 8. Concrete mix proportions and materials.
 - 9. Compressive breaking strength and type of break for both seven (7) days and twenty-eight (28) days.
- E. Additional tests of in-place concrete as deemed necessary by Engineer.

END OF SECTION 03 30 00

DIVISION 5 – METALS

SECTION 05 12 00 - STRUCTURAL STEEL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DESCRIPTION OF WORK

- A. Extent of Structural Steel work is shown on drawings, including schedules, notes and details to show size and location of members, typical connections and type of steel required.
- B. Structural Steel is that work defined is AISC "Code of Standard Practice" and as otherwise shown.
- C. Miscellaneous Metal Fabrications are specified in other sections of Division 5.

1.3 QUALITY ASSURANCE

Comply with provisions of following, except as otherwise noted:

- A. AISC "Code of Standard Practice for Steel Buildings and Bridges".
- B. AISC "Specifications for the Design, Fabrication, and Erection of Structural Steel for Building" including "Commentary" and Supplements issued.
- C. AISC "Specifications for Structural Joints using ASTM A325 or A490 Bolts".
- D. AWS D1.1 "Structural Welding Code".
- E. ASTM A6 "General Requirements for Delivery of Rolled Steel Plates, Shapes, Sheet Piling and Bars for Structural Use".

1.4 SUBMITTALS

- A. Submit shop drawings prepared under supervision of a registered professional engineer, including complete details and schedules for fabrication and assembly of structural steel.
- B. Include details of cuts, connections, camber, holes, and other pertinent data.
- C. Indicate welds by standard AWS symbols, and show size, length, and type of each weld.
- D. Provide setting drawings, templates, and directions for installation of anchor bolts and other anchorage's installed by others.

1.5 DELIVERY

- A. Deliver materials to site at such intervals to insure uninterrupted programs for work.
- B. Deliver anchor bolts and anchorage's devices, which are to be embedded in cast-in-place concrete or masonry, in ample time not to delay work.

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PART 2 - PRODUCTS

2.1 MATERIALS

- A. For fabrication of work, which is exposed to view, use material that is smooth and free of blemishes, including pitting, seam marks, roller marks, rolled trade names and roughness.
- B. Structural steel shapes, plates, and bars: Conform to ASTM A36.
- C. Cold formed steel tubing: Conform to ASTM A500 Grade B
- D. Hot formed steel tubing: Conform to ASTM A 501.
- E. Steel pipe: Conform to ASTM A53, Type E or S, Grade B, black finish except where noted to be galvanized.
- F. Anchor bolts: Conform to ASTM A307, non-headed type unless otherwise indicated.
- G. Threaded fasteners: Provide hexagonal heads and nuts for all connections to conform to ASTM A307 Grade A, regular low-carbon steel, bolts, and nuts.
- H. Welding electrodes: Comply with AWS Code, for high strength low-alloy steel, provide electrodes, welding rods and filler metals equal in strength and compatible in appearance with parent metal jointed.
- I. Steel primer paint: Zinc Chromate, oil-alkyd; TT-P-57, Type 1. Coordinate with fireproofing for compatibility.
- J. Metallic Shrinkage-Resistant Grout: Provide grout as manufactured by one of the following:
 - 1. Firmix: Euclid Chemical Co.
 - 2. Embeco 153; Master Builders
 - 3. Ferrolith G; Sonneborn/Contech.
 - 4. Irontox; Toch Brothers
 - 5. Kemox C; Sika Chemical
 - 6. Vibra-Foil; W.R. Grace

2.2 FABRICATION

- A. Fabricate and assemble structural assemblies in shop to greatest extent possible.
- B. Fabricate items in accordance with AISC Specifications and as indicated on final shop drawings.
- C. Provide camber in structural members where indicated.
- D. Properly mark and match-mark materials for field assembly.
- E. Fabricate for delivery sequence which will expedite erection and minimize field handling.
- F. Where finishing is required, complete assembly, including welding, before start of finishing operations.
- G. Provide finish surfaces of members exposed to view free of marking, burrs, and other defects.
- H. Weld or bolt shop connections as indicated.
- I. Bolt field connection except as noted otherwise.
- J. Provide high-strength threaded fasteners for principal bolted connections.
- K. Provide unfinished threaded fasteners for only bolted connection of secondary framing members to primary members, such as purlins and girts, and for temporary bracing.

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- L. Install high-strength threaded fasteners in accordance with AISC "Specifications for Structural Joints using ASTM A325 or A490 Bolts".
- M. Comply with AWS Code for procedures, appearance and quality of welds, and methods used in correcting welding work.
- N. Provide holes required for securing other work to structural steel framing, and for passage of other work through steel framing members, as shown on final shop drawings.
- O. Cut, drill or punch holes perpendicular to metal surfaces.
- P. Do not flame cut holes or enlarge by burning.
- Q. Drill holes in bearing plates.

2.3 SHOP PAINTING

- A. Shop paint structural steel except surfaces to be welded.
- B. Apply 2 coats to surfaces which are inaccessible after assembly.
- C. Clean steel in accordance with Steel Structures Painting Council.
- D. Apply at a rate to provide a uniform dry film thickness of 1.5 mils.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine areas and conditions under which structural steel work is to be installed.
- B. Notify Contractor in writing of conditions detrimental to proper and timely completion of work.
- C. Do not proceed until unsatisfactory conditions are corrected in a manner acceptable to Erector.

3.2 ERECTION

- A. Provide temporary shoring and bracing to bear imposed loads.
- B. Provide temporary guy lines to align structure as erection proceeds.
- C. Remove temporary shoring, bracing and guys when final connections are made, and roof slab or floor slab loads are imposed.
- D. Clean concrete and masonry bearing surfaces and roughen to improve bond to surfaces.
- E. Clean bottom surfaces of base and bearing plates.
- F. Set base and bearing plates on wedges or other adjusting devices.
- G. Tighten anchor bolts after supported members are plumbed.
- H. Do not remove wedges or shims, but if protruding, cut off flush with edge of base or bearing plate prior to packing with grout.
- I. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.
- J. Set structural frames accurately to lines and elevations indicated.
- K. Align and adjust members forming a part of a complete structure before permanently fastening.
- L. Clean surfaces which will be in permanent contact.
- M. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
- N. Level and plumb individual members within specified AISC tolerances.

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- O. Splice members only where indicated on shop drawings.
- P. On exposed welded construction, remove erection bolts, fill holes with plug welds and grind smooth.
- Q. Comply with AISC Specifications for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.
- R. Do not enlarge holes in members by burning or use of drift pins, except in secondary bracing members.
- S. Ream holes that must be enlarged to admit bolt.
- T. Do not use gas cutting torch in field for correcting fabricating errors in structural framing.
- U. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint and apply paint to exposed areas with same material as used for shop coat.

END OF SECTION 05 12 00

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DIVISION 26 - ELECTRICAL

SECTION 26 00 00 - BASIC ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including "Uniform General Conditions and Supplementary General Conditions and Division 01 Specification Sections, apply to the work of this Section.
 - 1. Where the term "Owner's Designated Representative" is used, it shall mean a member of the project's capital team as defined by the City of Beaumont.

1.2 WORK INCLUDED

- A. General Requirements specifically applicable to Division 26.
- B. The Contractor shall be responsible for:
 - 1. The work included consists of furnishing all materials, supplies, equipment, and tools, and performing all labor and services necessary for installation of a completely functional power, lighting, fire alarm and signaling systems. Complete systems in accordance with the intent of Contract Documents.
 - 2. Coordinating the details of facility equipment and construction for all Specification Divisions, which affect the work covered under this Division.
 - 3. Furnishing and installing all incidental items not actually shown or specified, but which are required by good practice to provide complete functional systems.
 - 4. Temporary power service and lighting for construction. Coordinating all shutdown dates and schedules with Owner's Representative and obtain all work-permits required by Owner.
- C. Intent of Drawings:
 - 1. The Drawings are necessarily diagrammatic by their nature and are not intended to show every connection in detail or every device or raceway in its exact location, unless specifically dimensioned. The Contractor shall carefully investigate structural and finish conditions and shall coordinate the work to avoid interference between the various phases of work. The Contractor shall be responsible for the proper routing of raceway, subject to prior review by the Owner and Engineer. Work shall be organized and laid out so that it will be concealed in furred chases and suspended ceilings, etc., in finished portions of the building, unless specifically noted to be exposed. All work shall be installed parallel or perpendicular to the lines of the building unless otherwise noted.

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2. The intent of the Drawings is to establish the type of systems and functions, but not to set forth each item essential to the functioning of the system. The drawings and specifications are cooperative, and work or materials called for in one and not mentioned in the other shall be provided. Review pertinent drawings and adjust the work to conditions shown. In case of doubt as to work intended, or here discrepancies occur between drawings, specifications, and actual conditions, immediately notify the Architect/Engineer and the Owner's representative, and propose a resolution.

1.3 RELATED WORK

- A. This Section shall be used in conjunction with the following other specifications and related Contract Documents to establish the total general requirements for the project electrical systems and equipment.
 1. Division 01 Sections included in the project specifications.
 2. The contract.

1.4 DESIGN CRITERIA

- A. Equipment and devices to be installed outdoors or in enclosures where the temperatures are not controlled shall be capable of continuous operation under such conditions per manufacturer's requirements.
- B. Compliance by the Contractor with the provisions of this Specification does not relieve him of the responsibilities of furnishing equipment and materials of proper design, mechanically and electrically suited to meet operating guarantees at the specified service conditions.
- C. Electrical components shall be UL listed and labeled.

1.5 REFERENCE CODES AND STANDARDS, REGULATORY REQUIREMENTS

- A. Standards of the following organizations as well as those listed in Division 01, may be referenced in the specification. Unless noted otherwise, references are to standards or codes current at the time of bidding.
 1. Association of Edison Illuminating Companies (AEIC)
 2. American National Standards Institute (ANSI)
 3. Institute of Electrical and Electronics Engineers (IEEE)
 4. Insulated Cable Engineers Association (ICEA)
 5. National Electrical Code (NEC)
 6. National Electrical Manufacturers Association (NEMA)
 7. Electrical Safety in the Workplace

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8. National Fire Protection Association (NFPA)
 9. Underwriter's Laboratories (UL)
 10. ASHRAE/IES 90.1 – Energy Standard for Buildings Except Low-Rise Residential Buildings
- B. Work, materials, and equipment must comply with the latest rules and regulations of the following.
1. National Electrical Code (NEC)
 2. Electrical Safety in the Workplace
 3. Occupational Safety and Health Act (OSHA)
 4. American with Disability Act (ADA)
 5. American Society for Testing and Materials (ASTM)
 6. Applicable state and federal codes, ordinances, and regulations
- C. Discrepancies. The drawings and specifications are intended to comply with listed codes, ordinances, regulations, and standards. Where discrepancies occur, immediately notify the Owner's representative in writing, and ask for an interpretation. Should installed materials or workmanship fail to comply, the Contractor is responsible for correcting the improper installation. Additionally, where sizes, capacities, or other such features are required more than minimum code or standards requirements, provide those specified shown.
- D. Contractor shall obtain permits and arrange inspections required by codes applicable to this Section and shall submit written evidence to the Owner and Engineer that the required permits, inspections, and code requirements have been secured.

1.6 SUBMITTALS

- A. Submit the following in addition to and in accordance with the requirements of Division 01 for submittal requirement.
1. Include inspection and permit certificates and certificates of final inspection and acceptance from the authority that have jurisdiction.
 2. Manufacturer's standardized schematic diagrams and catalog cuts shall not be acceptable unless applicable portions of it are clearly indicated, and non-applicable portions clearly deleted or crossed out.
 3. All schematic, connection and/or interconnection diagrams in accordance with the latest edition of NEMA.
 4. Provide submittals as required by individual specification Section.

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- B. Provide the following with each submittal:
 - 1. Catalog cuts with manufacturer's name clearly indicated. Applicable portions shall be circled, and non-applicable portions shall be crossed out.
 - 2. Line-by-line specification review by equipment manufacturer and contractor with any exceptions explicitly defined.
- C. Equipment Layout Drawing: 1/8-inch scale minimum drawings indicating electrical equipment locations. Dimensions for housekeeping pads should be indicated on these drawings. Indicate routing of conduit 2 inches and over on these drawings.
- D. Within the specified time window after award of contract, submit list of equipment and materials to be furnished.
 - 1. Itemize equipment and material by specification Section number; include manufacturer and identifying model or catalog numbers.
 - 2. Replace rejected items with an acceptable item within 2 weeks after notification of rejection.
 - 3. If a satisfactory replacement is not submitted within a two-week period, owner will notify contractor as to equipment manufacturer or type and make or material to be furnished. Provide designated items at no additional cost to owner.
- E. As-Built Record Drawings: The Contractor shall maintain an expert set of As-Built Record Drawings that show changes and any other deviations from the drawings. The markups must be made as the changes are done. At the conclusion of the job, these As-Built Record Drawings shall be transferred to AutoCad electronic files, in a format acceptable to the Owner, and shall be complete and delivered to the Owner's Representative prior to final acceptance. Refer to 01210 Project Administration for other requirements.

1.7 OPERATIONS AND MAINTENANCE MANUALS

- A. Submit for approval copies of operations and maintenance manuals as specified in Division 01 and the other Division 26, 27 and 28 sections. Each copy of the manuals shall be marked to indicate the specific models, sizes, types and options of the systems and equipment that were provided. Manuals not so marked will be rejected.

1.8 SAFETY

- A. The Contractor shall follow the safety procedures in addition to, and in accordance with, the requirements of Project Safety Manual (PSM).
 - 1. The Contractors shall be responsible for training all personnel under their employ in areas concerning safe work habits and construction safety. The Contractor shall continually inform personnel on hazards particular to this project and update the information as the project progresses.

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2. The Contractor shall secure all electrical rooms, to limit access, prior to energizing any high voltage (2.4KV or higher) switchgear and shall control access during the project after energization. The Contractor shall post and maintain warning and caution signage in areas where work is ongoing near energized equipment. The Contractor shall cover all energized live parts when work is not being done in the equipment. This includes lunch and breaks.
3. The Contractor shall strictly enforce OSHA lock out/tag out procedures. Initial infractions shall result in a warning; a second infraction shall result in the removal of the worker and his supervisor from the site. Continued infractions shall result in removal of the Contractor from the site.

1.9 SHORING AND EQUIPMENT SUPPORTS

- A. The Contractor shall provide all permanent and temporary shoring, anchoring, and bracing required to make all parts stable and rigid; even when such shoring, anchoring, and bracing are not explicitly called for.
- B. The Contractor shall support all panels, enclosures, and other equipment. This shall include bolting to the floor or solid structural steel to prevent tipping. Install free-standing electrical equipment on 4" thick concrete housekeeping pads that are provided by others. Under no condition shall equipment be fastened to non-rigid building steel (i.e., removable platform steel gratings, handrails, etc.).
- C. The Contractor shall provide racks and supports, independently mounted at structure, to support electrical equipment and systems supplied and installed under this contract. At no time shall the Contractor mount or suspend equipment from other disciplines' supports.

1.10 TEMPORARY POWER REQUIREMENTS

- A. Provide power distribution system sufficient to accommodate construction operations requiring power, use of power tools, electrical heating, lighting, and start-up/testing of permanent electric-powered equipment prior to its permanent connection to electrical system. Provide proper overload protection. Ground fault circuit interrupters (GFCI) are to be used on all 120-volt, single-phase, 15- and 20-amp receptacle outlets where portable tools and equipment are used. Ground fault circuit interrupters shall be evaluated weekly by the Contractor.
- B. Temporary power feeders shall originate from a distribution panel. The conductors shall be multi-conductor cord or cable per NEC for hard and extra-hard service multi-conductor cord.
- C. Branch circuits shall originate in an approved receptacle or panelboard. The conductors shall be multi-conductor cord or cable per NEC for hard and extra-hard service multi-conductor cord. Each branch circuit shall have a separate equipment grounding conductor.
- D. All receptacles shall be of the grounding type and electrically connected to the grounding conductor.

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- E. Provide temporary lighting by factory-assembled lighting strings or by manually assembled units. All lamps for general lighting shall be protected from accidental contact or breakage. Protection shall be provided by installing the lights a minimum of 7 feet from the work surface or by lamp holders with guards. Branch circuits supplying temporary lighting shall not supply any other load. Provide sufficient temporary lighting to ensure proper workmanship by combined use of day lighting, general lighting, and portable plug-in task lighting. Comply with OSHA required foot-candle levels and submit plan for approval by the owner.
- F. For temporary wiring over 600 volts, suitable fencing, barriers, or other effective means shall be provided to prevent access of anyone other than authorized and qualified personnel.
- G. Temporary power cords shall be kept off the ground or floor. The Contractor shall provide temporary supports as required to keep temporary cords off the ground or floor.

1.11 SUBSTITUTION OF MATERIALS AND EQUIPMENT:

- A. Refer to Uniform General Conditions and Supplementary General Conditions for substitution of materials and equipment.
- B. The intent of the Drawings and/or Specifications is neither to limit products to any manufacturer nor to discriminate against an "APPROVED EQUAL" product as produced by another manufacturer. Some proprietary products are mentioned to set a definite standard for acceptance and to serve as a reference in comparison with other products. When a manufacturer's name appears in these Specifications, it is not to be construed that the manufacturer is unconditionally acceptable as a provider of equipment for this project. The successful manufacturer or supplier shall meet all the provisions of the appropriate specification(s).
- C. The specified products have been used in preparing the Drawings and Specifications and thus establish minimum qualities with which substitutes must at least equal to be considered acceptable. The burden of proof of equality rests with the Contractor. The decision of the designer is final.
- D. When requested by the Architect/Engineer, the Contractor shall provide a sample of the proposed substitute item. In some cases, samples of both the specified item and the proposed item shall be provided for comparison purposes.
- E. Timeliness: The burden of timeliness in the complete cycle of submittal data, shop Drawings, and sample processing is on the Contractor. The Contractor shall allow a minimum of six (6) weeks' time frame for review of each submission by the office of the design discipline involved after receipt of such submissions by that design discipline. The Contractor is responsible for allowing sufficient time in the construction schedule to cover the cycles of data processing, including time for all resubmittal cycles on unacceptable materials, equipment, etc. covered by the data submitted. Construction delays and/or lack of timeliness in the above regard are the responsibility of the Contractor and will not be considered in any request for scheduled construction time extensions and/or additional costs to the Owner.

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- F. All equipment installed on this project shall have local representation, local factory authorized service, and a local stock of repair parts.
- G. Acceptance of materials and equipment will be based on manufacturer's published data and will be tentative subject to the submission of complete shop Drawings indicating compliance with the contract documents and that adequate and acceptable clearances for entry, servicing, and maintenance will exist. Acceptance of materials and equipment under this provision shall not be construed as authorizing any deviations from the Specifications unless the attention of the Architect/Engineer has been directed in writing to the specific deviations. Data submitted shall not contain unrelated information unless all pertinent information is properly identified.
- H. Certification: The Contractor shall carefully examine all data forwarded for approval and shall sign a certificate to the effect that the data has been carefully checked and found to be correct with respect to dimensions and available space and that the equipment complies with all requirements of the Specifications.
- I. Physical Size of Equipment: Space is critical; therefore, equipment of larger sizes than shown, even though of specified manufacturer, will not be acceptable unless it can be demonstrated that ample space exists for proper installation, operation, and maintenance.
- J. Should a substitution be accepted, and should the substitute material prove defective, or otherwise unsatisfactory for the service intended within the guarantee period, this material or equipment shall be replaced with the material or equipment specified at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Materials and Equipment: Labeled and/or listed as acceptable to the authority that has jurisdiction as suitable for the use intended. Materials shall be of a standard industrial quality if no specifications or specific model numbers are given.
- B. Where two or more units of the same class of material are required, provide products of a single manufacturer. Component parts of materials or equipment need not be products of the same manufacturer.
- C. All materials shall be new and unused.
- D. Provide non-metallic material in corrosive areas or as otherwise specified.
- E. All electrical equipment, conduit, and boxes mounted outside shall be supported using corrosion resistant (stainless steel or galvanized) products, e.g., Unistrut, hangers, rods, bolts, nuts, washer, etc.

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PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. Install work in compliance with NEC latest edition.
- B. Install material and equipment in accordance with manufacturers' instructions. Provide calibrated torque wrenches and screwdrivers and tighten all terminals, lugs, and bus joints using it.
- C. Comply with startup procedures as defined by Construction Manager and Owner.
- D. Arrange electrical work in a neat, well-organized manner. Do not block future connection points of electrical service. Install all electrical work parallel or perpendicular to building lines unless noted otherwise, properly supported with purpose-designed apparatus, in a neat manner.
- E. Apply, install, connect, erect, use, clean, adjust, and condition materials and equipment as recommended by the manufacturers in their published literature.
- F. Make opening through masonry and concrete by core drilling in acceptable locations. Restore openings to original condition to match remaining surrounding materials.
- G. Support: All piping shall be adequately and properly supported from the building structure as specified in this Division and in accordance with the National Electrical Code.
- H. Receptacle and light switch cover plates shall be labeled with the panel name and circuit number engraved on the front with 3/16" high lettering.

3.2 CLEANUP

- A. Remove and legally dispose of demolished items, rubbish, and debris from the construction site daily, and at the completion of the work. Failure to do so may result in the cleanup being performed by others and all costs thereof being deducted from the Contractor's final payment.

3.3 EQUIPMENT PROTECTION

- A. Protect equipment and materials during shipment, storage and construction against damage and contamination.
- B. Items that become damaged or contaminated shall be restored to a "like new" condition or replaced at the Contractor's expense

3.4 FIELD QUALITY CONTROL

- A. Arrange for testing and commissioning of electrical systems, equipment, and materials prior to final acceptance of the work. Acceptance tests and commissioning shall be performed as specified in Division 01 and the other Division 26, 27 and 28 sections, and in applicable codes, standards, and manufacturers' instructions.

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- B. Provide all test equipment, materials, and labor necessary to perform the tests, and coordinate with the other trades for necessary services, such as scaffolding and the uncoupling of motors.
- C. Notify the Owner's Representative 3 working days in advance of tests. The Owner shall witness the tests unless the Owner's Representative waives such witnessing in writing.
- D. Notify manufacturers sufficiently in advance of tests for which the manufacturers should be present.
- E. Replace any equipment or materials found to be defective or found to be of lesser quality than that specified or shown on the drawings.
- F. Provide written test reports, signed, and dated, for all tests prior to acceptance of the electrical equipment by the Owner.
- G. Provide the training specified in each specification section

3.5 SERVICE CONTINUITY

- A. Maintain continuity of electric service to all functioning portions of process or buildings during the hours of normal use. Phase construction work to accommodate Owner's occupancy requirements.
- B. Arrange temporary outages for cutover work with the Owner. Keep the outages to a minimum number and minimum length of time.
- C. All service outages shall be requested in writing a minimum of two weeks prior to the date. Owner reserves the right to postpone shutdowns up to 24 hours prior to the shutdown at no additional cost. Outage requests shall include a schedule of the work to be performed and the time requirements. More than two weeks' notice may be required for major outages. Consult project manager/construction manager for assistance planning major outages with Owner well in advance of submitting a formal request.
- D. The Contractor shall obtain all appropriate Owner permits for working in equipment.

3.6 HAZARDOUS LOCATIONS

- A. Equipment, wiring, devices, and other components located within hazardous areas to be of appropriate type per NFPA requirements.
- B. Ground exposed non-current carrying parts of entire electrical system in hazardous areas, in accordance with NEC and as instructed by Owner.

3.7 SLEEVES AND SEALS

- A. Provide sealing and/or fire stopping where electrical equipment passes through walls, ceilings, and floors. Seals shall be watertight and/or fire rated as applicable.

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3.8 CONSTRUCTION REVIEW

- A. The Engineer or Owner's representative will review and observe installation work to ensure compliance by the Contractor with requirements of the Contract Documents.
- B. Review, observation, assistance, and actions by the Engineer or Owner's representative shall not be construed as undertaking supervisory control of the work or of methods and means employed by the Contractor. The review and observation activities shall not relieve the Contractor from the responsibilities of these Contract Documents.
- C. The fact that the Engineer or Owner's representative do not make early discovery of faulty or omitted work shall not bar the Engineer or Owner's representative from subsequently rejecting this work and insisting that the Contractor make the necessary corrections.
- D. Regardless of when discovery and rejection are made, and regardless of when the Contractor is ordered to correct such work, the Contractor shall have no claim against the Engineer or Owner's representative for an increase in the Contract price, or for any payment on account of increased cost, damage, or loss.

3.9 QUALITY ASSURANCE

- A. Electrical work shall be performed by licensed Journeyman or registered Apprentice Electricians. The number of apprentices on a project shall not exceed the number of Journeymen. Electricians shall carry a copy of their license or registration while working on the Owner's projects.
- B. Contact the Owner's Code Inspection Department before starting the project to arrange for periodic inspections. Normal inspections will be performed at no cost to the Contractor, but the costs for repeat re-inspections of rejected work may be deducted from the Contractor's final payment.

3.10 SHIPPING HANDLING AND STORAGE

- A. For deliveries of equipment to the Owner, notify the Owner's Representative of the deliveries 3 working days in advance. Deliveries that arrive without adequate notice may be rejected.
- B. Provide unloading and storage for Owner furnished equipment that is shipped to the project site.
- C. Pick up, transport and unload at the project site Owner furnished equipment that is stored in the Owner's warehouses.
- D. Provide packaging Waste management in accordance with Division 1.

3.11 WARRANTY

- A. Provide warranties in accordance with the requirements of Uniform General and Supplementary Conditions (UGC).

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- B. Guarantee work for a period of one year from the date of the Owner's final acceptance of the project (Substantial Completion). A manufacturer's warranty beginning upon equipment receipt or startup shall be extended to one year from final project acceptance. A manufacturer's warranty more than one year shall remain in effect for its entire time period.

3.12 CLEANUP

- A. Remove and legally dispose of demolished items, rubbish, and debris from the construction site daily, and at the completion of the work. Failure to do so may result in the cleanup being performed by others and all costs thereof being deducted from the Contractor's final payment.

3.13 EQUIPMENT PROTECTION

- A. Protect equipment and materials during shipment, storage and construction against damage and contamination.
- B. Items that become damaged or contaminated shall be restored to a "like new" condition or replaced at the Contractor's expense.

3.14 FIELD QUALITY CONTROL

- A. Arrange for testing and commissioning of electrical systems, equipment, and materials prior to final acceptance of the work. Acceptance tests and commissioning shall be performed as specified in Division 01 and the other Division 26, 27 and 28 sections, and in applicable codes, standards, and manufacturers' instructions.
- B. Provide all test equipment, materials, and labor necessary to perform the tests, and coordinate with the other trades for necessary services, such as scaffolding and the uncoupling of motors.
- C. Notify the Owner's Representative 3 working days in advance of tests. The Owner shall witness the tests unless the Owner's Representative waives such witnessing in writing.
- D. Notify Manufacturers sufficiently in advance of tests for which the manufacturers should be present.
- E. Replace any equipment or materials found to be defective or found to be of lesser quality than that specified or shown on the drawings.
- F. Provide written test reports, signed, and dated, for all tests prior to acceptance of the electrical equipment by the owner.
- G. Provide the training specified in each specification section.

END OF SECTION 26 00 00

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SECTION 26 05 26 – GROUNDING

PART 4 - GENERAL

4.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including "Uniform General Conditions and Supplementary General Conditions and Division 01 Specification Sections, apply to the work of this Section.
- 1. Where the term "Owner's Designated Representative" is used, it shall mean a member of the project's capital team.

4.2 REFERENCES

- A. NFPA 70 – National Electrical Code.
- B. NECA 1-2000 – Standard Practices for Good Workmanship in Electrical Contracting.
- C. NFPA 99 – Standard for Health Care Facilities.

PART 5 - PRODUCTS

5.1 MATERIALS AND EQUIPMENT

- A. Ground Electrode Conductors: Stranded, tinned, annealed copper cable.
- B. Equipment Grounding Conductors: As specified by Section 16120, green insulation, sized in accordance with NFPA 70Code, Table 250.122.
- C. Grounding Clips: Steel City Type G, or equal.
- D. Ground Rods: Copper-encased steel, 3/4" diameter, minimum length 10 feet.

PART 6 - EXECUTION

6.1 INSTALLATION

- A. Install ground system as indicated, in accordance with the applicable requirements of the NFPA 70 and NECA 1-2000.
- B. Install #6 AWG grounding electrode conductors or larger in conduit, bonded at each end.
- C. Install grounding conductors continuous, without splice.
- D. Provide a separate, insulated equipment grounding conductor in all feeder and branch circuit conduits. Terminate each end on a listed grounding lug, bus, or bushing.
- E. Bond grounding electrode conductors to metal water pipe using suitable ground clamp. Make connections to flanged piping at street side of flange. Provide bonding jumper around water meter.

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- F. Bond all building steel to grounding electrode system
- G. Install Exothermic Welded ground connectors where they are concealed or inaccessible. Exothermic welding shall be used on all connections to rod, plate and building steel grounding electrodes
- H. Electrical Service: Bond main switchboard ground bus to grounding electrode system.
- I. Bond all equipment cabinets, junction boxes, outlet boxes, motors, controllers, raceways, conduit, fittings, switchgear and other metallic equipment and enclosures with an equipment grounding conductor. Unless some separate grounding provision is specified or indicated, equipment and enclosures will be considered to be grounded by the continuous grounded metallic conduit or raceway system; however, bonding jumpers shall be provided wherever necessary to ensure the electrical continuity. Equipment grounding conductor shall be bonded to enclosure at all junction boxes where feeder/branch circuit splices/taps are made, as well as all distribution and utilization equipment.
- J. Transformers:
 - 1. Transformers with Secondary Neutrals: Transformer secondary neutral shall be grounded to the grounding electrode system using a separate grounding electrode conductor. Use of the transformer primary feeder equipment grounding conductor as the grounding electrode conductor is prohibited. This contractor shall provide a suitable grounding electrode.
 - 2. Main bonding jumpers shall be located at the first disconnecting means
 - 3. System bonding jumpers shall be located at the source of a separately derived system.
- K. Conduit Grounding Bushings: Install grounding bushings on all Conduits terminating in equipment that has a ground bus. Ground each conduit by means of a bonding jumper securely and permanently attached to the grounding bushing and to the ground bus in the equipment. Bonding jumper size shall be same or larger than the equipment ground in the raceway it is bonding. Multiple conduits shall be permitted to be bonded with a single jumper, provided it is sized for the largest circuit OCPD it is bonding. Alternately, the equipment ground in each conduit can be looped, stripped, and terminated (without cutting/splicing) in its conduit's bushing and continued to the ground bus of the equipment.

6.2 GROUND RESISTANCE MEASUREMENTS

- A. Method: The Fall of Potential method accurate within plus or minus two (2) per cent.
- B. Instrument: Biddle Digital Resistance Tester Catalog Number 250200.
- C. Maximum Acceptable Resistance: Two (2) OHMS.
- D. Documentation:

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1. Method and equipment used for measurement.
 2. Calibration date of equipment used.
 3. Plot plan outlining measurement points.
 4. Name of person(s) performing measurement.
 5. Date of test.
- E. Testing shall be performed by a third-party NETA certified testing agency
- F. Reference Grounding Point:
1. Provide in branch circuit or distribution panelboard.
- G. Electrical Apparatus Grounding:
1. Electrical Apparatus Grounding.

Equipment

Method

Permanently installed equipment

With a separate #10 THWN green insulated, continuous grounding conductor not more than 15 feet long to the closest ground bus. Run in its own separate conduit.

Ground terminal of 120V power receptacles

Same as above.

Metal switch and receptacles plates

By means of mounting screw connections to the device mounting yokes.

Metal Raceways

Install a grounding bushing on each conduit entering the Panelboard. Connect each bushing to the panelboard ground bus with a separate #12 green continuous, insulated, copper grounding conductor.

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2. Non-Electrically Conductive - Surface Grounding:

Equipment

Method

Connected to grounding system by means of cords and grounding jacks. Cords of #10 copper, neoprene jacketed, extra flexible, 600V, heavy duty type equipped with approved lug for bolting to device and approved plug at opposite end.

With a separate #10, green, insulated, continuous grounding conductor not more than 15 feet long to the closest ground bus.

With a separate #10, green, insulated, continuous grounding Conductor not more than 15 feet long connected to the nearest ground bus.

END OF SECTION 26 05 26

SECTION 26 05 29 - SECURING AND SUPPORTING METHODS

PART 7 - GENERAL

7.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including "Uniform General Conditions and Supplementary General Conditions for The State Of Texas Building Construction Contracts" and Division 01 Specification Sections, apply to the work of this Section.
 - 1. Where the term "Owner's Designated Representative" is used, it shall mean a member of the project's capital team.

7.2 WORK INCLUDED

- A. Raceway, cable tray, and equipment supports
- B. Fastening hardware
- C. Coordinate location of concrete equipment pads

7.3 QUALITY ASSURANCE

- A. Support systems shall be adequate for weight of equipment and conduit, including wiring, which they carry. Support systems shall be sized to support an additional 25% for future loads

7.4 COORDINATION

- A. Coordinate with other trades where conduit and cable tray supports are in the same location as piping, ductwork, and work of other trades and where supports are furnished and installed under other Divisions. Supporting from the work or supports of other Contractors shall not be allowed except by express, written permission of the Owner.

7.5 SUBMITTALS

- A. Provide submittals in accordance with and in addition to Section 26 00 00 Basic Electrical Requirements, and Division 01 for submittal requirement.

PART 8 - PRODUCTS

8.1 MATERIAL

- A. Support Channel:
 - 1. All non-corrosive locations: Hot-dip galvanized steel.
 - 2. Corrosive locations: Nonmetallic fiberglass.
 - 3. Outdoors or in spaces subject to outside air, including Air Handling Units: 316 Stainless Steel.

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- B. Hardware:
 - 1. All non-corrosive locations: Hot-dip galvanized steel.
 - 2. Corrosive locations: Fiberglass threaded rod, attachments and fasteners shall be used with fiberglass supports.
 - 3. Outdoors or in spaces subject to outside air, including Air Handling Units: 316 Stainless Steel.
- C. Threaded Rod: used for rack support from structure above; 3/8-inch minimum diameter.

PART 9 - EXECUTION

9.1 INSTALLATION

- A. Fasten hanger rods, conduit clamps, and outlet and junction boxes to building structure using precast insert system, expansion anchors, or beam clamps. Do not use spring steel clips and clamps. Provide necessary calculations to select proper support materials for electrical equipment, raceway, and cable tray supports.
- B. Fixture whips shall be supported with "batwings" or tie wire, no more than one support per wire to avoid lifting the ceiling grid.
- C. Install hangers, anchors, sleeves, and seals as indicated, in accordance with manufacturer's written instructions and with recognized industry practices to ensure supporting devices comply with requirements. Comply with requirements of NEC for installation of supporting devices. Install supports with spacing in compliance with NEC requirements.
- D. Use toggle bolts or hollow wall fasteners in hollow masonry, plaster, or gypsum board partitions and walls; expansion anchors in solid masonry walls; or concrete surfaces; sheet metal screws in sheet metal studs; and wood screws in wood construction.
- E. Do not fasten supports to piping, ductwork, mechanical equipment, or conduit.
- F. Do not use powder actuated anchors without written permission from the Engineer.
- G. Do not drill structural steel members without written permission from the Structural Engineer.
- H. Fabricate supports from structural steel or steel channel, rigidly welded, or bolted to present a neat appearance. Use hexagon head bolts with spring lock washers under all nuts.
- I. Bridge studs top and bottom with channels to support recessed mounted cabinets and panelboards in stud walls.

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- J. Install surface mounted cabinets and panelboards with a minimum of four anchors. Provide strut channel supports to stand cabinet 1-5/8 inches off wall. Utilize "Post Bases" and support channel to attach to structural floor. Extend vertical channel a minimum of 12" above panel to accept horizontal conduit support channel
- K. Provide extra care in supporting PVC conduit to protect it from potential damage.
- L. Use fiberglass for nonmetallic raceway systems supports in areas subject to corrosives.
- M. All supports in contact with floor using stanchion type support shall be solidly bolted to the permanent structural floor.
- N. Conduit supports shall have at a minimum; the bottom support member constructed of double strut. This horizontal member shall be double-nutted, and the supporting all-thread rod shall be trimmed to one inch below lowest nut.
- O. Coordinate with other electrical work, including raceway and wiring work, as necessary to interface installation of supporting devices with other work.
- P. Do not anchor support to columns. Where panelboards, cables, or conduits are routed on the face of a column provide "column hugging" channel supports.

9.2 TOUCH-UP

- A. Touch-up all scratches on securing and supporting system and paint the ends of channel after cutting with an approved zinc chromate or 90 percent zinc paint.

END OF SECTION 26 05 29

SECTION 26 05 53 - ELECTRICAL IDENTIFICATION

PART 10 - GENERAL

10.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including "Uniform General Conditions and Supplementary General Conditions and Division 01 Specification Sections, apply to the work of this Section.
 - 1. Where the term "Owner's Designated Representative" is used, it shall mean a member of the project's capital team.

10.2 WORK INCLUDED

- A. Nameplates and tape labels
- B. Wire and cable markers
- C. Conduit color coding and labeling

10.3 REFERENCES

- A. NFPA 70 – National Electrical Code (latest edition)

10.4 SUBMITTALS

- A. Provide submittals in accordance with and in addition to Section 26 00 00 Basic Electrical Requirements, and Division 01 for submittal requirement.
 - 1. Furnish nameplate identification schedules listing equipment type and nameplate data with letter sizes and nameplate material.

PART 11 - PRODUCTS

11.1 MATERIALS

- A. Equipment Nameplates:
 - 1. For electrical panel equipment, provide engraved three-layer laminated plastic nameplates, engraved white letters on a black background.
 - 2. For fire alarm system provide engraved three-layer laminated plastic nameplates with white letters on a yellow background.
 - 3. For security and CCTV system panels, provide engraved three-layer laminated plastic nameplates with white letters on a blue background.
- B. Underground Warning Tape
 - 1. Manufactured polyethylene material and unaffected by acids and alkaline.

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2. 3.5 mils thick and 6 inches wide.
 3. Tensile strength of 1,750 psi lengthwise.
 4. Printing on tape shall include an identification note BURIED ELECTRIC LINE, and a caution note CAUTION. Repeat identification and caution notes over full length of tape. Provide with black letters on a red background.
- C. Conductor Color Tape and Heat Shrink:
1. Colored vinyl electrical tape shall be applied perpendicular to the long dimension of the cable or conductor.
 2. In applications utilizing heat shrinkable tubing shall be used to obtain the proper color coding for the length of the conductor in the cabinet or enclosure. Variations to the cable color coding due to standard types of wire or cables are not acceptable.
- D. Warning labels: Provide warning labels with black lettering on red background with a minimum of 1/2" lettering.
- E. Tape Labels: Embossed adhesive tape, with minimum 1/4-inch letters for labeling, exposed conduit, control device stations, exposed junction and pull boxes and manual motor starter units, etc.
1. White letters on black background for normal power.
 2. White letters on red background for emergency/standby power.
- F. Concealed J-Box and Cover plate Voltage Labels: Black permanent marker indicating voltage, panel name with circuit designations, system identification for other systems (BAS, Data, Etc.)

11.2 EQUIPMENT IDENTIFICATION AND LABELING

- A. Externally mark all equipment, devices, conduits for feeders, branch circuits and similar devices using the same circuit designations as indicated on construction drawings and final Record Documents. Conduit marks shall be made at the point of origin and destination of the conduits, using permanent marker.
- B. Nameplates shall be black laminated rigid phenolic with white core. Nameplate minimum size shall be 1 inch high by 3 inches long with 3/16-inch-high engraved white letters. Supply blank nameplates for spare units and spaces.

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- C. Nameplate Fasteners: Fasten nameplates to the front of equipment only by means of stainless steel self-tapping screws. Nameplates installed on dead-front assemblies shall be installed with the dead-front or cover open or removed from the equipment so as not to drill into the interior components of equipment. Screws shall be of length so as not to protrude into the interior of the equipment more than 1/8". Stick-ons or adhesives are not acceptable unless the NEMA enclosure rating is compromised, then only epoxy adhesive shall be used to attach nameplates.
- D. Nameplate Information: The general naming convention shall consist of the following segments:
 - 1. Building number (M-XXX) where equipment is located.
 - 2. Building floor where electrical equipment is located;
 - 3. System voltage: M (medium voltage), H (277/480V) or L (120/208V);
 - 4. Individual equipment identification: A, B, C, etc.
- E. In general, provide the following information for the types of electrical equipment as listed:
 - 1. Switchgears, Switchboards, Distribution Panels and Motor Control Centers: On mains, identify the piece of equipment, the source and room number, voltage characteristics (i.e., 480/277V 3PH 4W). For each branch circuit protective device, identify the load served (Asset ID shall not be used for breaker identification). See example on wall.
 - 2. Transformers, Individual Starters, Contactors, Disconnect Switches, Transfer Switches and Similar Equipment: Identify the device designation, voltage characteristics, source and load served with room numbers.
 - 3. Panelboards: Identify panelboard designation, voltage characteristics, and source designation and source room number.
 - 4. Panelboards: Prepare a neatly typed circuit directory printed on 80 weight paper. This directory shall be installed behind clear heat-resistant plastic in a metal frame tack welded to the inside of the door for each panelboard. Identify circuits by equipment served and by building room numbers where room numbers exist. Indicate all spares and spaces. Adhesive mounted directory pocket is not acceptable. Removing and attaching panel schedules from the Drawings is not acceptable. Circuits shall not be identified as "existing." Where changes are made to a schedule, all existing information shall be incorporated into a new and complete schedule.
 - 5. Panelboards, Pull, Junction and Outlet Boxes:

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- a. With ½ inch high permanent lettering, identify conduits connected to panelboards, pull, junction and outlet boxes with the complete circuit number of the conductors contained therein. Neutral conductors shall be identified by wire marker tags in the panelboards, pull, junction and outlet boxes. Identify the circuit conductors with permanent tags which indicate circuit designation.
 - b. Emergency circuit junction boxes and their covers shall be painted red. Circuit identification shall be marked on the junction box cover.
 - c. Fire alarm circuits (only) shall be marked with yellow covers and “Fire Alarm” marked on the face.
6. Equipment and raceways over 600 Volts: Provide “WARNING - HIGH VOLTAGE - KEEP OUT” signs on all equipment. With 2-inch-high lettering, mark all exposed raceways containing conductors operating in excess of 600 volts every 100 feet and at each wall or floor penetration with the words “WARNING - HIGH VOLTAGE”.
 7. Dedicated outlets: Dedicated is understood to be specific equipment listed by equipment number in the panel schedules or identified on the Drawings. Dedicated also includes computer outlets.
 8. Remote Ballasts: For remote ballasts not within five (5) feet of their associated lighting fixture, provide appropriate permanent lettering on both the ballasts and the light fixture to identify which are mated to the other.
 9. Wires - Circuit number and voltage
 10. Warning Labels – Apply warning labels per NEC 110 as applicable.

PART 12 - EXECUTION

12.1 INSTALLATION

- A. Degrease and clean surfaces to receive nameplates or tape labels.
- B. Install nameplates parallel to equipment lines.
- C. Secure plastic nameplates to equipment fronts using screws or rivets. Use of adhesives shall be per Owner’s approval. Secure nameplate to outside face of flush mounted panelboard doors in finished locations.
- D. Do not drill into live panelboards. Remove dead front or cover when drilling into panels to prevent damaging interior components during installation.

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12.2 WIRE IDENTIFICATION

- A. Provide wire markers on each conductor in panelboards, gutters, pull boxes, outlet, and junction boxes, and at load connection. Identify with branch circuit or feeder number for power and lighting circuits. Label control wire with number as indicated on schematic and interconnection diagrams or equipment manufacturer's shop drawings for control wiring.
- B. Conductors for power circuits to be identified per the following schedule.

NOTE TO SPEC WRITER: EDIT THE FOLLOWING DESCRIPTIVE SPECIFICATIONS FOR ANY CONFLICTS WITH THE EXISTING COLOR CODING.

	System Voltage			
Conductor	480/277V	208/120V	240/120V High Leg	Medium Voltage
Phase A	Brown	Black	Black	One White Band
Phase B	Purple	Red	Orange (High-Leg)	Two White Bands
Phase C	Yellow	Blue	Blue	Three White Bands
Neutral	Gray with tracer	White with tracer	White with tracer	N/A
Grounding	Green	Green	Green	Green
IG	N/A	Green w/Yellow	Green w/Yellow	N/A

- C. The above colors shall be used unless requirements of code require assorted colors. When connecting to existing circuits, existing color coding shall be utilized. The neutral tracer color shall match the phase conductor color that it is associated with. For connection to existing circuits only, lighting circuits with shared grounded (neutral) conductor are not required to have tracer colors on the wire.
- D. Secondary conductors from isolation transformers shall be Conductor 1-orange and conductor 2-brown.

12.3 NAMEPLATE ENGRAVING SCHEDULE

- A. Provide nameplates of minimum letter height as scheduled below. Nameplates shall be same as equipment names indicated on the Drawings.

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- B. Individual Circuit Breakers in Distribution Panelboards, Disconnect Switches, Motor Starters, and Contactors: 1/4-inch; identify source to device and the load it serves, including location.
- C. Dry Type Transformers Not in Substations: 3/8-inch; identify equipment designation. 1/4-inch; identify primary and secondary voltages, primary source, and secondary load and location.
- D. Panelboards: 3/8-inch; identify equipment designation. 1/4 -inch; identify source, voltage, and bus ampere rating.

END OF SECTION 26 05 53

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SECTION 26 50 00 - LIGHTING

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Lighting fixtures.
- B. Fixture mounting hardware.
- C. Lamps.
- D. Emergency Lighting.
- E. Lighting control equipment.
- F. Source quality control.
- G. Standard fixtures.
- H. Appendix 1 Summary Table of Illumination Level Requirements.

1.2 RELATED SECTIONS

- A. Section 01 33 00, Submittal Procedures.
- B. Section 01 33 23, Shop Drawings, Product Data, and Samples.
- C. Lighting Control Panel board (addressable panels) are specified in section 26 09 26.

1.3 MEASUREMENT AND PAYMENT

- A. General: Lighting, as specified herein, will not be measured separately for payment but will be paid for as part of the Contract lump-sum price for Electrical Work as indicated in the Bid Schedule of the Bid Form.

1.4 REFERENCES

- A. Institute of Electrical and Electronics Engineers, Inc. (IEEE):
 - 1. IEEE C62.41 IEEE Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits
- B. National Electrical Manufacturers Association (NEMA):
 - 1. NEMA C81 Series Electric Lamp Bases and Holders
 - 2. NEMA WD7 Occupancy Motion Sensors Standard
- C. American Society for Testing and Materials (ASTM):
 - 1. ASTM A123/A123M Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

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- 2. ASTM A1008/ Standard Specification for Steel, Sheet, Cold-Rolled, A1008M Carbon, Structural, High-Strength Low-Alloy, High-Strength Low Allow with Improved Formability, Solution Hardened, and Baked Hardenable
- D. Military Specification:
 - 1. MIL-DTL-24441/20 Paint, Epoxy-Polyamide, Green Primer, Formula 150, Type III
- E. Illuminating Engineering Society of North America (IES):
 - 1. IES Lighting Handbook, Reference, and Application
- F. National Fire Protection Association (NFPA):
 - 1. NFPA 101 Life Safety Code
- G. Underwriters Laboratories Inc. (UL):
 - 1. UL 94 Standard for Safety Tests for Flammability of Plastic Materials for Parts in Devices and Appliances
 - 2. UL 496 Standard for Safety Lamp holders
 - 3. UL 508 Standard for Safety Industrial Control Equipment
 - 4. UL 773 Standard for Safety Plug-In, Locking Type Photocontrols for Use with Area Lighting
 - 5. UL 916 Standard for Safety Energy Management Equipment
 - 6. UL 8750 Standard for Safety of Light Emitting Diode (LED) Equipment for use in Lighting Products
 - 7. UL 1598 Standard for Safety Luminaires
- H. Environmental Protection Agency (EPA)

1.5 REGULATORY REQUIREMENTS

- A. Refer to Section 20 70 26, Common Materials and Methods for Electrical Systems, for requirements.
- B. Federal Communications Commissions:
 - 1. Title 47 Rules and Regulations
- C. California Code of Regulations (CCR):
 - 1. Title 8 Industrial Relations
 - 2. Title 22 Social Security
 - 3. Title 24, Part 2 California Building Code

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4. Title 24, Part 3 California Electrical Code

1.6 SUBMITTALS

- A. General: Refer to Section 01 33 00, Submittal Procedures, and Section 01 33 23, Shop Drawings, Product Data, and Samples, for submittal requirements and procedures.
- B. Product Data Luminaire Manual: Submit light fixture manual which provides product data indicating fixture construction, photometric performance, installation, and maintenance requirements. Include the following information and exhibits:
1. The Manual shall be complete with cover, title page, and table of contents. The cover and title page shall identify the document, project, client, contract name, number, and date of issuance. The table of contents shall provide at a glance the overall document scope and structure as a minimum, a heading for each fixture type with each grouping prefaced by a "general information" report sheet.
 2. The Manual shall include drawings and illustrations of sufficient detail to show the following:
 - a. Fixture housing, hardware, and finishes;
 - b. Lighting controlling elements;
 - c. Electrical components, including lamp holders, driver, and provision for conduit entry; and
 - d. Support details including foundation. Indicate weight of fixture, complete with lamps.
 3. The Manual shall include procedures for installation of the complete lighting unit in its final service location. Provide templates for mounting of light poles. Provide dimensions to locations of openings and parts interfacing with remote systems, such as pole bases, mounting hardware, auxiliary electrical equipment, lighting control equipment, and lamps.
 4. The Manual shall include operation and maintenance requirements in accordance with Section 01 78 23, Operation and Maintenance Data, and the following information:
 - a. Materials and components clearly indicated in the parts list;
 - b. Re-lamping methods;
 - c. Special tools required; and
 - d. Frequency of inspection, tightening, or other service recommended for Preventative maintenance.

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5. The Manual shall include calculations indicating capability of light poles with light fixtures installed to withstand wind load requirements. Proper selection of anchor bolts shall be included in the computation.
- C. Test Reports: Submit certified test reports of factory and field tests performed, in accordance with applicable referenced standards and Specification requirements.
- D. Samples: Submit one complete light fixture or luminaire for each type required. Each sample requires the Engineer's approval and shall become the property of the District. Approved samples will become the Engineer's control samples.

1.7 DELIVERY, HANDLING, AND STORAGE

- A. Handle and transport products in a manner that prevents damage.
- B. Wrap and package products to avoid damage.
- C. Indelibly mark each carton with minimum 1/2-inch-high letters containing the following information:
 1. Fixture, lamp, or component type.
 2. Quantity.
 3. Manufacturer's name and product number.
- D. Store products in a clean, dry, and secure storage area pending installation.

1.8 JOBSITE CONDITIONS

- A. Install new lamps not earlier than 48 hours before the date of final inspection.
- B. Install exposed parts of fixtures after construction, painting, and general cleanup in the area have been completed.
- C. Inspect surfaces and structures to, and on, which products will be installed before the work of this Section begins and ensure that these surfaces are capable of supporting the products. Surfaces that will be concealed by products shall be finished before products are installed.

PART 2 –PRODUCTS

2.1 LIGHT EMITTING DIODE (LED) LIGHTING

This specification covers the requirements to provide Light Emitting Diode (LED) lighting fixtures. The use of any other lighting fixture is subject to BART Engineer's approval.

- A. LED Lighting Fixture
 1. LED Fixture requirements are as described below:
 - a. Definition: The LED Fixture shall consist of LED Luminaire, detachable LED Driver, and mounting hardware.

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- b. Each fixture shall have its own LED driver. LED drivers shall be placed within LED Fixture, unless otherwise specified.
- c. Input voltage: 120 VACS to 277 VACS (± 10 percent), 60HZ
- d. Efficacy: Shall be as indicated by the Engineer
- e. NEMA Rating: Shall be as indicated by the Engineer
- f. Brightness and glare: Lighting systems shall be free from distracting and uncomfortable glare; care shall be exercised to prevent specular reflections on signage, direct glare from exposed lamps, high brightness areas of individual fixtures, and reflections in glazing or other specular surfaces.
- g. Warranty: Minimum 5 years
- h. Cooling System: Shall consist of a heat with no fans, pumps, or liquids and shall be resistant to debris buildup that does not degrade heat dissipation performance.

B. LED Luminaire

- 1. Luminaire requirements are as described below:
 - a. Definition: Luminaire Assembly is the LED assembly without LED driver.
 - b. Correlated Color Temperature (CCT) shall be 3500K indoor, 4000K outdoor.
 - c. Color Rendering Index (CRI) shall be ≥ 85 .
 - d. A minimum of 80,000 operating hours before reaching the L70 lumen output degradations point without catastrophic failure.
 - e. Difficult Access: 100,000 operating hours with remote driver if practical.
 - f. Conform with UL 8750.
 - g. Compliance to FCC CFR, Title 47, Section 15.

C. LED Driver General requirements:

- 1. LED Driver general requirements as described below:
 - a. Input voltage: 120 VACS to 277 VACS (± 10 percent)
 - b. Frequency: 60Hz
 - c. Operating temperature: -40 degrees Celsius to +50 degrees Celsius.
 - d. Minimum efficiency: 90 percent

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- e. Driver shall be dimmable.
- f. Self-protected, including surge protection & short circuit protection.
- g. Compliance to FCC CFR, Title 47, Section 15.
- h. A minimum of 50,000 operating hours.
- i. Driver must have a Power Factor (PF) of ≥ 0.90 .
- j. Connectivity: wired Power-line Carrier (PLC) and/or wireless controller.
- k. Regulatory compliance minimum UL recognized for the class. The driver shall be field replaceable with quick disconnect.

D. LED Dimmable Driver

- 1. LED Dimmable Driver requirements are as described below:
 - a. (Fail-Safe) 0-10V dimming standard. Lamps dimmable from 100 percent to 1 percent of maximum light output.
 - b. Withstand up to a 1000-volt surge without impairment of performance as defined by IEEE C62.41 Category A.
 - c. No visible change in light output with a variation of ± 10 percent line voltage input.
 - d. Driver shall provide step-free, continuous dimming from 100 percent to 1 percent. Driver shall respond similarly when rising from 0 percent to 100 percent.
 - e. LED dimming driver shall provide continuous step-free, flicker free dimming over the operating range.

2.2 (LEGACY) FLUORESCENT AND HIGH INTENSITY DISCHARGE-LIGHTING FIXTURES

A. Requirements:

- 1. Provide lighting fixtures, complete and ready for service, in accordance with UL 1598. Fixtures shall be of the number, type, material, finish, electrical components, and characteristics, and shall be provided with the necessary hardware and auxiliary equipment, as indicated. Light fixtures provided with provisions for raceways shall be UL-listed for this use. Comply also with applicable requirements and guidelines of the IES Lighting Handbook.
- 2. Mark fixtures clearly with manufacturer's name and catalog number, voltage, acceptable lamp type, maximum wattage, and label for intended use.

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3. Fixtures shall be UL listed for the location and application indicated.

B. Materials:

1. Thicknesses, gages, and tempers of products shall be as indicated, and as recommended by the manufacturer for the specific finish, proper forming operations, and structural requirements.
2. Reflector material shall be prefinished, copper-free aluminum alloy, minimum thickness 0.032-inch, Architectural Type 1 with Class M1 anodic coating providing 83 percent reflectivity.
3. Acrylic for lenses and diffusers shall be manufactured from virgin-acrylic extrusion or Injection molding pellets.
4. Polycarbonate for lenses shall be manufactured from elevated
temperature resin designed for use with HID lamps.
5. Glass for lenses shall be of tempered borosilicate pressed or spun glass, minimum 0.13 inch thick.
6. Stainless steel shall be Type 304.

C. Finishes:

1. Provide lighting fixtures completely factory-finished in colors to match the Engineer's control samples.
2. Do not start finishing operations until fabrication and forming operations have been completed.
3. Aluminum to be anodized shall be given the Aluminum Association's Architectural Class 1 anodic coating.
 - a. Anodize aluminum in accordance with procedures established by alloy manufacturer to achieve color within specified range.
 - b. Apply a clear organic protective coating to exposed aluminum surfaces that may experience prolonged contact with caustic material such as concrete and plaster.
4. Minimum cleaning of metal before painting shall be a five-stage phosphatizing system consisting of alkali cleaner, hot water rinse, zinc phosphatizing solution with toner, water rinse at room temperature, and chromic acid rinse for neutralizing.
5. Interior fixtures with surfaces not exceeding 150 degrees Fahrenheit shall be statically charged and painted two coats minimum of acrylic gloss enamel to a minimum total dry film thickness (DFT) of 2.5 mils.
6. Interior fixtures with surfaces exceeding a temperature of 150 degrees Fahrenheit, but not exceeding 300 degrees Fahrenheit, shall be statically

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charged and painted with silicone-alkyd enamel, two coats minimum to a total DFT of 2.5 mils.

7. Provide fixtures specified to be painted with one coat of epoxy-polyamide at a minimum DFT of 2 mils and one coat of aliphatic urethane to a minimum DFT of 2 mils. Interior reflective surfaces specified to be painted shall be as for interior fixtures.
8. Finish fixtures specified to be porcelain enameled, or painted fixtures with reflectors specified to be porcelain enameled, shall receive porcelain-enamel coating.
9. Reflective surfaces not specified to be specular shall be gloss white, guaranteed nonyellowing, with a reflectance rating of not less than 88 percent.
10. Provide galvanized coating, where indicated, hot dip galvanized according to ASTM A123/A123M. Where painting of the galvanized surface is indicated, pretreat the surface with a spray of zinc chromate-vinyl butyryl wash primer at least 0.05 mil thick; apply an 80 percent zinc dust, 20 percent zinc oxide, alkyd resin primer conforming to MIL-DTL-24441/20; and then apply a single-component, Type II, modified acrylic, polyurethane topcoat.

or

D. Electrical Components:

1. Lamp holders:

- a. Provide lamp holders and sockets in accordance with NEMA C81 and of the class and style recommended by the lamp manufacturer for the specific lamp required for each fixture design and rated for 660 W, 600 V, or as indicated.
- b. Fasten lamp holders and sockets rigidly and securely to the mounting surface with the necessary provisions to prevent lamp holder from turning and to be front removable without dismantling any part of the fixture.
- c. Locate lamp holders and sockets correctly in the lighting fixtures place each specified lamp in proper position with relation to the fixture design and to ensure proper distribution of light. Clearly mark lamp holders and sockets to indicate manufacturer, lamp type, voltage, and appropriate listings.
- d. Provide replacement lamp holders for legacy installations with body and finish to match existing fixtures remaining in the location of work. Lamp holders shall consist of nonferrous metal components of heavy duty, vibration resistant design. Lamp holders shall be in accordance with UL 496.

to

2. Drivers:

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- a. Drivers shall be electronic type with an efficiency greater than 90 percent, in accordance with Article 2.01 C herein.
- b. Mount each driver securely inside the fixture so as to obtain the necessary heat dissipation.
3. Fixture Wiring:
- a. Provide fixture wires of stranded tinned-copper construction, not smaller in wire size than 16 AWG. Provide insulation of silicone rubber type SF-2, 200 degrees Celsius rated. Mark conductor size, temperature rating, voltage, and manufacturer clearly on the insulation of each conductor.
- b. Provide wires between lamp holders and associated operating starting equipment with the same ampacity rating as leads from the ballast. Wiring within the fixtures shall comply with the California Electrical Code.
- c. Tape wires at points of abrasion. Do not permit splices within fixtures other than as required to connect lamp holders and Provide wireways and wiring channels with rounded edges bushed holes wherever conductors pass through. Install bushings at points of entrance and exit of wiring.
4. Fixture Grounding:
- a. Unless otherwise specified, provide the housing of each ballasted lighting fixture with a separate, factory-installed grounding device.
- b. A separate grounding conductor shall be attached to the grounding device on each fixture housing and connected to the ground lug terminal in the hand hole of the light pole.
- c. Fluorescent fixtures connected end-to-end shall have a common ground conductor between them to provide a continuous ground path.
- d. Provide only galvanized rigid conduit (GRC) and accessories, except in underground or concrete encased duct banks.
- e. Light poles shall be grounded by use of a separate grounding conductor connected at one end to the grounding lug in the hand hole of each pole, and the other end connected to the grounding bus in the lighting distribution panel.
- E. Fixture Hardware:
1. Latch and release mechanism, hinges, pins, and other retaining parts of fixtures; screws, bolts, or other assembly and mounting parts shall be manufactured of Type 304 or Type 316 stainless steel. Provide springs of heavy-duty stainless steel. Provide self-retaining type retaining hardware.

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2. Light transmitting panels shall be held in the frames in a neat, rattle-free manner that will provide proper tolerance for normal expansion and contraction.
3. Fabricate internal brackets from ASTM A1008/A1008M sheet steel, zinc-coated after fabrication, or finished extruded aluminum.
4. Gaskets, sealants, and adhesives shall be formed from silicone rubber.
5. Provide bolts, nuts, washers, screws, nails, rivets, and other fastenings necessary for proper installation or assembly of work. When exposed to the atmosphere, items shall be made of 300 series stainless steel. Fastenings within the housing shall be hot-dip galvanized steel. Nuts shall have captive externally footed lock washers.
6. Junction boxes suitable for the intended location and wiring requirements shall be provided with four 3/4 inch threaded and plugged conduit entries.

2.3 FIXTURE MOUNTING HARDWARE

A. Requirements:

1. Provide fixtures with brackets, straps, canopies and stems, poles, and miscellaneous hardware suitable for the mounting method specified. Pendant mounted fixtures shall have seismic resistant swivel mountings.
2. When exposed to public view, fabricate and finish hardware in material matching the fixture body.
3. Canopies, holders, and similar parts shall be drawn or spun in one piece with a minimum 0.026-inch finished thickness.
4. Tubing used for stems shall be seamless drawn with a minimum of 1/16-inch wall thickness of size and length as indicated. Stems shall be provided for pendant mounted fixtures of length as required for the specified mounting height with swivel hangers or ball aligners.

B. Light poles:

1. Provide the type, configuration, and dimensions indicated. The pole shall resist wind loads in accordance with the California Building Code, with Basic Wind Speed of 80 mph, Exposure C, Importance Factor 1.0. Maximum deflection of pole shall be five percent when fully loaded. Furnish poles as indicated with handhole and flush cover with tamper proof screw and grounding stud, luminaire mounting tenon/bracket, base cover and mounting hardware including anchor bolts, nuts, washers, and baseplate to permit accurate alignment and installation of pole and luminaire as indicated. Light pole anchor bolt covers shall have tamper proof screw.

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2. Light pole ladder and safety cable shall conform to CCR Title 8, Industrial Relations, Division 1, Chapter 4, Subchapter 7, Group 1, Article 4, Section 3277(m), Ladder Safety Systems, and CAL/OSHA.

2.4 LAMPS

- A. Requirements: Provide each lighting fixture with the number, type, and wattage of lamps as indicated. Lamps used in the illumination system shall be of standard manufacture, readily available, and of the highest efficiency and life consistent with other requirements of the illumination system. Each type of lamp shall be provided by a single manufacturer.
- B. LED (Light Emitting Diode): See Section 2.01. All luminaires shall be LED type. If a legacy fixture is to remain, the lamp shall be replaced with an LED equivalent lamp.

2.5 LIGHTING CONTROL EQUIPMENT

- A. Requirements: Lighting control components shall be suitable for the lighting system specified and compatible for interface with other associated control devices. Lighting control components shall be rated for continuous service and shall operate satisfactorily in every respect while the branch circuit power supply voltage to each system is within plus or minus ten percent of rated voltage at 60 Hz.
- B. All new lighting panels shall be addressable and remotely controllable, except Emergency lighting panels. Addressable panels will also provide status of breakers and contactors to SCADA. See Section 26 09 26, Lighting Control System Panel boards.
- C. Photocell General Requirements:
 1. Conform with UL 773, UL 916.
 2. Provide operation in temperature range of 0 degrees Celsius to 50 degrees Celsius.
 3. Provide dusk-to-dawn operation, with adjustments from 2 to 50-foot candles with a ten-second time delay to preclude false switching.
 4. Provide weatherproof and tamperproof equipment.
- D. Installation:
 1. Indoor photocells:
 - a. Indoor photocell shall be mounted above existing lighting fixtures and central to the area illuminated by the electrical lighting that will be controlled. The photocell shall be mounted such that only reflected light enters; no direct light is permitted to enter the photocell.
 2. Outdoor photocells:

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- a. Outdoor photocells shall be mounted in an area exposed to full daylight and not shadowed or directly exposed to nighttime illumination. Photocells must be mounted horizontally, facing north, with hooded portion facing upward.
- E. Occupancy Sensor: Occupancy Sensor general requirements are as described below:
1. Conform to NEMA WD 7.
 2. Provide operation in temperature range of 0 degrees Celsius to 50 degrees Celsius.
 3. Provide Adjustable Time Delay, 1-30 min (1 min. increments).
 4. Occupancy sensors shall be of type Passive infrared (PIR) or dual-technology PIR/Ultrasonic.
 5. Utilize multiple segmented lens with internal grooves to eliminate dust and residue build-up.
 6. Occupancy sensors shall have a 360-degree coverage pattern for both PIR and dual-technology detection.
- F. Wired Occupancy Sensor: Wired Occupancy Sensor requirements are as described below:
1. Connects directly to compatible driver without need of power pack or another interface.
 2. Turn off or reduces lighting automatically through time delay when a room or area is vacated by last person to occupy space.
 3. Occupancy sensor shall have self-adjusted sensitivity and timing to ensure optimal lighting control.
 4. Furnished with field-adjustable controls for time delay and sensitivity to override any self-adjusting features.
 5. Settings and learned parameters shall be saved in non-volatile memory and not lost should power be interrupted and subsequently restored.
- G. Wireless Occupancy Sensor: Wireless Occupancy Sensor requirements are as described below:
1. Operational life of 10 years without the need to replace batteries when installed per manufacturer's recommendation.
 2. Communicates directly to compatible RF receiving devices through use of a radio frequency communications link or through wireless gateway.

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3. Provides a visible method of indication to verify that motion is being detected during testing and that the unit is communicating to compatible RF or wireless gateway receiving devices.

2.6 EMERGENCY LIGHTING

- A. Emergency lighting system shall be arranged to provide the required illumination automatically in the event of interruption of normal light, such as failure of utility opening of a circuit breaker or fuse, or any manual opening(s), including accidental switch off of the controlling normal lighting system.
- B. Emergency lighting shall be 1/3 of total lighting.
- C. For tunnels and Transbay Tube all lighting shall be emergency lighting.
- D. Emergency lighting shall be connected through UPS.
- E. The batteries will provide sufficient power to maintain the nominal voltage of the inverter for a period of 90 minute minimum.
- F. All exit signs.
- G. Mandatory locations for luminaries must be provided for the following:
(Note: Near means within 5 feet)
 1. At each exit door.
 2. All safety exit signs.
 3. Outside and near each final exit door.
 4. Near stairs so that each tread receives direct light.
 5. At each change of direction.
 6. Near each first aid post.
 7. Near any change of floor level.
 8. At each intersection of corridors.
 9. At each piece of firefighting equipment and call point.
 10. In Electrical and Mechanical rooms.
 11. At Escalator such that top and bottom steps/landings are illuminated.
- H. Raceway
 1. New Raceway in Existing and New Facility.
 - a. Normal and Emergency lighting circuits must be in separate conduits.
 2. Existing Raceway in Existing Facility.

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- a. Normal and Emergency lighting circuits can be mixed in the same conduit with special permission from BART Engineering.

2.7 SOURCE QUALITY CONTROL

- and
- A. The lighting fixture to be evaluated shall be typical of the unit it represents, clean free from mechanical defects, equipped with the proper fittings, and with the lamp of the size and type in the position recommended for service operation.
 - B. Test UL-listed material, equipment, and components in accordance with UL standards. Test material, equipment, and components not covered by UL standards in accordance with nationally recognized standards. Provide material, equipment, and components bearing a label tag or certification of such inspection.
 - C. Perform and report tests for photometric performance in accordance with the approved methods outlined by the IES Lighting Handbook for photometric testing, and include data on candlepower, distribution, zonal lumens, maximum luminance values, and luminaire efficiency, including complete coefficients of utilization tables to indicate compliance with performance requirements.
 - D. Test data shall be reported on 8-1/2 inch by 11-inch sheets and shall be certified by a nationally recognized independent testing laboratory.

2.8 STANDARD FIXTURES

- A. Tunnel Fixtures: Provide fixtures that are UL listed for wet locations, and that include the following features, appurtenances, and accessories:
 - 1. Housing shall be 0.125-inch extruded aluminum with anodized finish. Housing upper portion shall have an integral continuous clevis on each side, accommodating a slide grip hanger assembly, eliminating all mounting hole requirements.
 - 2. End caps shall be 0.150 thick cast aluminum with service entry hubs on each end for 1/2-inch conduit. End caps and hub assembly shall be firmly held against the extruded housing and lens by a cast aluminum bracket on each end.
 - 3. Reflector/driver cover shall be of 0.05-inch aluminum and chain hinged for ease of access with baked-on white enamel finish
 - 4. Provide gasket continuous along the length of lens/housing intersection with one piece 0.250-inch close celled neoprene gasket. Gasket the entire inner wall of each end cap with 0.250-inch close celled neoprene gasket.
 - 5. Provide wall-mounting bracket for 45 degree mounting tilt. Bracket shall be galvanized plate steel and moveable along the entire length of fixture housing. Two brackets per fixture are required.

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6. Diffuser shall be of 0.125 acrylic with internal prisms for low brightness and smooth external surface for minimizing dirt collection.
 7. Provide electronic ballast for single fluorescent rapid start lamp at 277 V.
 8. Tunnel lighting fixtures and mounting devices shall be designed to withstand air pressure waves ranging from plus 80 psf to minus 80 psf repetitively with each passing train.
 9. Lamp shall be energy efficient T8, rapid start fluorescent lamp rated 265 mA, wattage rating as indicated. Lamps for T8 fluorescent lighting shall have reduced mercury contents as specified in this section. Lamps shall have a rated minimum average life of 30,000 hours, minimum 78 Color Rendering Index (CRI) and minimum 4100 degrees K Correlated Color Temperature (CCT).
- B. Emergency Trip Station Blue Light: Provide fixtures that are UL listed for wet locations, and that include the following features, appurtenances, and accessories:
1. Provide housing and outlet box of glass reinforced (30 percent) polyester material conforming to UL 94V-0. Polyester housing and box shall be nonfading, permanent gray color, ultraviolet resistant.
 2. Provide blue enclosing globe of heat-resistant glass with integral male threads for mounting into housing.
 3. Boxes shall be four-way tapped for 3/4-inch conduit. Plugs shall be of same polyester material. Provide box with mounting ears.
 4. The blue light shall be composed of two ultra-bright, long lasting LED lamps and shall be visible at any point within 250 feet from its designated mounting location.
 5. The blue light LED lamp shall provide a minimum of 200 lumens output.
 6. The blue light shall flash at a minimum rate of 78 flashes per minute.
 7. The blue light shall be housed in vandal-resistant, impact resistant polycarbonate retractor housing lens resistant UV-fade.
 8. The light LEDs shall be connectorized and field replaceable.
- C. Operator's Access Aisle Fixture: Provide fixtures that are UL listed for wet locations, and that include the following features, appurtenances, and accessories:
1. Provide one piece housing of die cast aluminum with integral cooling fins over the optical chamber and electrical compartments and double thick gussets on the support arm-mounting end. Housing shall form a half-cylinder shape with 55-degree front face plane providing a recess to allow a flush single-latch detail. All hardware shall be stainless steel.

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2. Provide lens frame and cam-latch of die cast aluminum and mate with 1-inch minimum depth around the gasket flange. Provide integral cast hinges with stainless steel pins that allow removal, without tools, from the housing. Camlatch shall provide positive locking and sealing of the optical chamber.
 3. Provide clear tempered glass lens 3/16-inch thick with one piece molded perimeter gasket seal retained by eight stainless steel clips.
 4. Provide reflector assembly of specular alzak aluminum mounted in an aluminum frame attaching to fixture housing as a one-piece module. Reflector module shall be field rotatable in 90-degree increments.
 5. Provide factory pre-wired electrical module components on a single plate with a socket to a quick-disconnect plug and include a wire seal through the barrier wall. Attach module to housing with no-tool hinges and latches, accessible by opening the lens frame only.
 6. Support arm shall be one-piece extruded aluminum, fully radiused internal bolt guides top and bottom and circular cut for specified round pole. Provide luminaire to pole attachment by internal draw bolts and include a pole reinforcement plate with wire strain relief.
 7. Provide finish housing, lens frame, latch, and support arm with thermoset polyester powder coat paint in natural aluminum color. Components shall be thoroughly cleaned and primed with protective chromate conversion coating prior to powder coating. Powder coating shall be 2.5 mils nominal thickness.
 8. Provide LED lamp, 277 VAC.
- D. Cross Passage Yellow Light: Fixture shall be identical to emergency trip blue light fixture except equipped with yellow enclosing globe. Enclosing globe shall be of heat-resistant glass with integral male threads for mounting into housing.
- E. Wet Standpipe Valve White Light: White light shall be LED strobe type, 120 VAC, 1000 effective candela. The base shall be comprised of corrosion-resistant, anodized aluminum, with integrated power supply. Enclosing case shall be of heat resistant, Fresnel lens, and clear type.

PART 3 – EXECUTION

3.1 INSTALLATION OF LIGHTING FIXTURES

- A. Install lighting fixtures as indicated and in accordance with the manufacturer's installation instructions and recommendations, complete with lamps, hangers, brackets, poles, fittings, and accessories, ready for operation.
- B. Align, mount, and level lighting fixtures uniformly.

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

- C. Avoid interference with, and provide clearance for, the equipment. Where the indicated locations for the lighting fixtures conflict with the locations for other equipment, change the locations for the lighting fixtures by the minimum distances necessary and as approved by the Engineer.
- D. For suspended lighting fixtures, provide the indicated mounting height clearances between the bottoms of the fixtures and the finished floors.
- E. Anchor lighting fixture supports to the structural slab or to structural members as Indicated. Supports shall maintain the fixture positions after cleaning and relamping. Provide supports for seismic loading in accordance with applicable requirements of the California Building Code and the California Electrical Code.
- F. Surface-mounted lighting fixtures shall be bracketed rigidly from the mounting surfaces. Provide 1/4-inch clearance between surfaces when the fixture is flat-mounted against concrete surfaces. Install fixtures with a non-cumulative dimensional alignment tolerance of 1/16-inch when mounted in continuous runs with one inch spacing between individual fixtures. Nipples carrying wires between fixtures shall be watertight.
- G. Where aluminum is placed in contact with dissimilar materials, except galvanized steel, zinc, or stainless steel, treat contact surfaces as follows:
 - 1. When in contact with dissimilar metals, apply a prime coat of zinc chromate primer followed by two coats of aluminum and masonry paint.
 - 2. When in contact with concrete, masonry, and plaster, apply zinc chromate primer, bituminous paint, aluminum and masonry paint, or pressure-sensitive tape to aluminum contact surfaces.
 - 3. When in contact with wood or other absorptive materials, apply two coats of aluminum house paint to such materials, and protect aluminum contact surfaces with bituminous paint.
- H. Welding:
 - 1. Locate welds in assemblies to be anodized so as to conceal visible discoloration in the heat-affected zone.
 - 2. Where weld metal will be exposed after anodizing, select filler alloys to closely match composition of base metal. Follow manufacturer's recommendations for such filler alloys.
- I. Provide pendant fixtures with stem swivel hangers to assure a plumb installation with a minimum 45-degree swing from horizontal in all directions. Where 45-degree movement of fixture is not possible due to field conditions, provide, in addition to above, cross bracing of aircraft cable to restrict movement in direction of potential contact. Tubing shall be not less than 3/16-inch diameter. Motion of swivels or hinged joints shall not cause sharp bends in conductors or damage to insulation. For heavy pendant-mounted fixtures, where support is to be independent of the outlet box, provide stem swivel hangers with fixture studs.

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

- J. Install fixtures to be pole-mounted in accordance with the manufacturer's installation instructions.
- K. Provide required lamps in each pole-mounted lighting fixture as soon as fixtures are professionally installed.

3.2 INSTALLATION OF DRIVERS

- A. Install drivers, other than those mounted integrally within luminaries, in such a manner that the driver is protected from weather, moisture, and other atmospheric conditions, and in ambient temperatures that will not cause the temperature of the driver housing hot-spot to exceed UL requirements.
- B. Voltage drop to lamp, due to remote driver mounting, shall not exceed one percent of the nominal lamp voltage. Provide secondary driver conductors with 600 V insulation. When more than one driver is mounted at one location, the minimum spacing between driver shall be 6 inches in a horizontal direction and 12 inches in a vertical direction. Mount driver components securely in such a manner as to obtain the necessary heat dissipation.

3.3 INSTALLATION OF LIGHT POLES

- A. Install light poles as indicated and in accordance with the manufacturer's installation instructions and recommendations. Light poles shall be grounded as indicated on the Contract Drawings.

3.4 CONCRETE BASES

- A. Provide necessary templates and anchor kits before starting work, and coordinate installation of anchors in concrete with the work specified under Division 3 - Concrete.

3.5 FIELD QUALITY CONTROL

- A. Inspect luminaries, lamps, and associated hardware before and after installation to ensure that they are of the quality and type specified and indicated and are free of defects and damage.
- B. Deliver luminaries and lighting equipment to the project site complete with related items, completely wired and assembled.
- C. Whenever practicable, test lighting systems at the same time that the distribution panelboard or switchboard is assessed.
- D. Replace lamps that fail within 90 days after final acceptance without additional cost to the District.
- E. Test light poles for continuity to the grounding system.

END OF SECTION 26 50 00

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

SECTION 31 – EARTHWORK

SECTION 31 11 15 – SITE PREPARATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including "Uniform General Conditions and Supplementary General Conditions For The State Of Texas Building Construction Contracts" and Division 01 Specification Sections, apply to the work of this Section.

1.1 SECTION DESCRIPTION – NOT LIMITED TO THE FOLLOWING

- A. Project layout
- B. Preparation of existing rough grade for deposition of fine grading materials and turf.
 - a. Cleanup and removal of debris and material, labor, tools, machinery, and processes necessary to complete the above.

1.2 RELATED SECTIONS

- A. Tree and Plant Protection: Section 32 0191

All work under this contract not specifically designated on the drawings shall be field directed by the owner or owner's representatives.

The use of any area for the purposes of equipment access, storage and employee parking shall be subject to the approval of the owner in accordance with Division I. Prior to mobilization, the contractor shall coordinate and get approval from the owner or owner's representatives regarding all access points, storage areas, employee parking areas and temporary facilities.

1.3 WORK INCLUDED

- A. Clearing and grubbing required for this Work includes, but is not necessarily limited to:
 - 1. Felling of trees including removal of stumps, roots, and other debris.
 - 2. Removing shrubs, grass, weeds, and other understory vegetation.
 - 3. Construction of protection fencing around trees and/or tree saves areas designated to remain if applicable.
 - 4. Removal of all debris.
 - 5. If siltation fencing is required, landscape contractor shall coordinate with general contractor on installation and maintenance procedures.

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

PART 2 - MATERIALS

- 2.1** The Contractor shall submit an outline of methods, materials, and machinery to be employed to complete work in this section for approval if requested by owners.
- 2.2 HERBICIDE**
A. Round Up or approved equal.
- 2.3 PROTECTION FENCING**
A. 5' high chain link fence with 2" post at every 8' to 10' on center.
B. 4' metal "T" posts with 48" orange fiberglass snow fencing or equal may be used only if prior approved by owner or landscape architect.
- 2.4 SILTATION FENCING**
A. 18" Mirafi 400 or equal.

PART 3 – EXECUTION

- 3.1** All work shall be performed under the direct supervision of the contractor's designated superintendent. The above shall apply to all work, whether performed by the contractor's own forces or sub-contractors.
- 3.2 SITE INSPECTION**
A. The drawings do not purport to show all objects existing on the site.
B. Before commencing the work, verify with the owner or owner's representatives regarding objects to be removed and all objects to be preserved.
C. If fence locations conflict with existing condition, contact landscape architect immediately for alternative solution.
D. It is contractor's responsibility to locate all existing utility lines. Consult with owner or owner's representatives for any unclear requirements for disconnecting, abandonment, and capping of existing utility lines.
E. Locate all existing active utility lines traversing or adjacent to the site and determine the requirements for their protection.
F. Attention is called to Division I requirements for protection of existing utilities and for reporting utilities not shown in plan.
- 3.3 REMOVAL OF DEBRIS**
A. Remove all debris from the site and leave the site in a neat and orderly condition to the approval of the owner or owner's representatives.
B. All debris, the product of demolition, clearing, etc. unless otherwise designated, shall be removed from the site, and legally disposed of. Such debris will not be allowed to accumulate so as not to constitute a hazard to the public.
C. Debris shall include all barricades or fencing and silt fencing upon completion of their intended use.
- 3.4 PREPARATION OF AREAS TO RECEIVE FILL (*if applicable*)**
A. Treat all existing vegetative areas with Round Up and allow 7 - 10 days for effect.

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

- B. Remove all dead vegetation.
- C. Scarify top 4" of existing soil.
- D. Apply till material.

3.5 TREE PROTECTION FENCING

- A. Install 48" orange snow fencing continuously around all forested areas which are to remain undisturbed within the site as well as those isolated individual trees to remain.
- B. Repair as necessary during the work to keep areas free of intrusion by machinery, materials, equipment, and workmen.

3.6 SILTATION FENCING

- A. Install specified fencing at all curbs, property lines and edges of undisturbed forested areas to enclose the perimeter adjacent to all disturbed areas.
- B. Fence shall be installed to prevent the migration of silt onto streets and adjacent properties and undisturbed forested areas.

3.7 CLEARING AND GRUBBING (*if applicable*)

- A. Felling of Trees
 - 1. Protect roots and branches of trees designated to remain.
 - 2. Remove only trees and shrubs within clearing areas designated on the drawings unless otherwise indicated or directed.
 - 3. Completely remove stumps, root and other debris protruding through ground surface to a minimum depth of 12 inches.
 - 4. Carefully and cleanly cut roots and branches of trees indicated to be left standing, where such roots and branches obstruct new construction.
- B. Grubbing
 - 1. Remove all surface rocks, stumps, roots, and other vegetation within limits of construction to a minimum depth of 6".
 - 2. Do not leave any roots greater than 3 inches in diameter in the ground.

3.8 STRIPPING TOPSOIL (*if applicable*)

- A. Strip to whatever depths encountered in such a manner to prevent intermingling with underlying subsoil or other objectionable material.
- B. Remove heavy growths of vegetation from areas before stripping.
- C. Where trees are indicated to be left standing, stop topsoil stripping a sufficient distance from trees to prevent damage to main root system.
- D. Stockpile topsoil where directed.
- E. Construction storage piles to freely drain surface water.
- F. Cover storage piles if required to prevent windblown dust.

END OF SECTION 31 11 15

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

SECTION 31 22 16 - FINE GRADING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the contract, including general and supplementary conditions and Division-1 specification sections, apply to the work specified in this section.

1.2 RELATED SECTIONS

- A. Turf and Grasses: Section 32 9200

1.3 SCOPE

- A. Machinery restrictions.
- B. Site preparation for grass areas.
- C. Finished grading.
- D. Prevention of excessive weed growth in lawns.

PART 2 - MATERIALS

2.1 TOPSOIL

- A. Topsoil for all fine grading operations shall be classified as "Enriched Topsoil" made from sandy loam with organic compost, free of debris or any vegetative matter.
 - 1. Nature's Way Resources, Conroe, Texas (936) 321-1200

2.2 SUBMITTALS

- A. Contractor shall submit a quart bag sample of topsoil to landscape architect for approval prior to delivering material to site.

PART 3 - EXECUTION

3.1 GENERAL

- A. Finished grading shall be defined as placing and grading of additional soil (topsoil 1" minimum) required bringing the grade to the required grades for lawns. As well as smooth out rough areas. Where practical and as directed, the use of heavy machinery shall be kept to a minimum.

3.2 PLACEMENT OF FINE GRADE MATERIALS

- A. Clear the subgrade of stones larger than 3 inches (3") in any dimension, and of concrete, wood, construction debris, and other deleterious matter. Excavate to a depth of 12 inches (12") all areas that have become saturated with oil, gasoline or bituminous products and backfill with clean earth.
- B. Import topsoil directly to site of deposition or stockpile new topsoil on site in quantity needed to produce the required depth after spreading. Protect topsoil piles from erosion with tarpaulins and limit boards.
- C. Spread topsoil to a minimum settled depth of 1" and feather smoothly into finished grade at edges to blend with adjacent ground shapes.
- D. Exercise precautions to keep the topsoil friable and porous. Do not handle or work topsoil when it is excessively wet, or during a rainfall. Do not place topsoil on any

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

subgrade that has not been loosened or tilled or allowed for drainage. Loosen and till the full depth of the topsoil and re-till any areas that become unduly compacted by vehicular movement.

3.3 FINE GRADING

- A. The Contractor shall be responsible for minor adjustments to the finished subgrade if such treatment is required in the opinion of the landscape architect.
- B. Hand rakes the surface, removing all clods and undesirable material greater than one half inch (1/2") from ground surface. Fill all low spots with specified materials and cut irregularities to the acceptance of the landscape architect.
- C. An acceptable fine grade shall be free from depressions greater than 6 inches (6") over any given space of 25' except at grade transitions which shall be gradual and even.
- D. During the finished grading operations, all swales and additional swales that may be required to drain areas shall be finished. In general, all grade adjustments shall be made so there are no areas that will have standing water.
- E. To prevent excessive weed growth in the lawn areas, the contractor should be prepared to immediately install the lawn upon the completed and acceptable finished grade.

3.4 CLEAN UP AND PROTECTION

- A. After completion of fine grading and topsoil operations, do not drive trucks or other heavy equipment over finished areas.
- B. Upon completion of the work, remove all debris and excess material from the site so that the area is left neat and clean.

END OF SECTION 31 22 16

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

SECTION 31 63 24 - DRILLED FOOTINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings, Technical Specifications, owner furnished standards, general conditions for construction contract, safety requirements of OSHA and prevailing building codes & city, state, and county.

1.2 DESCRIPTION OF WORK

- A. Extent of drilled footings is shown on drawings.
- B. Location of footings including diameters of shafts and bells is shown on drawings.
- C. Elevation of bottom of bells, tops of shafts and details are shown on plans.
- D. Placement of concrete.

1.3 QUALITY ASSURANCE

- A. Engage a licensed Professional Engineer to perform layouts and measurements of drilled footings.
- B. Layout work for footings to lines and levels required before excavation.
- C. Provide actual horizontal axial locations, diameters, bottom, and top elevations.
- D. Employ testing laboratory to determine designated bearing strata and to perform concrete tests.

1.4 JOB CONDITIONS

- A. Site Information
 - 1. Data on subsurface conditions are not intended as representations or warranties of continuity of such conditions.
 - 2. Owner is not responsible for interpretations or conclusions drawn by contractor from data shown.
 - 3. Data are made for convenience of Contractor and are not guaranteed to represent conditions that may be encountered.
- B. Existing Utilities
 - 1. Locate underground utilities by careful hand excavation before starting footing excavation.
 - 2. Protect from excavation operation utilities that are to remain in place.
 - 3. Should uncharted or incorrectly charted utilities be encountered contact Engineer for directions as to procedure.
 - 4. Repair damaged utilities to satisfaction of owner.

PART 2 - PRODUCTS

2.1 MATERIALS

Concrete and reinforcing as noted in Section 03012 - Cast-in Place Concrete and Section 03011 - Concrete Reinforcing.

**#21-340 City of Beaumont
Athletic Complex-4
Light Pole Modifications**

PART 3 - EXECUTIONS

3.1 EXCAVATION

- A. Excavate footings to required depths shown on drawings or to desired bearing strata.
- B. Excavate closely spaced footings and those occurring in fragile or sand strata, only after adjacent footings have been excavated, filled with concrete, and allowed to set.
- C. Excavate shafts to depths and diameter shown then excavate bells to sizes indicated on drawings.
- D. Prior to the placement of concrete inspect excavation and remove any loose material.

3.2 REINFORCING

- A. Clean steel thoroughly prior to fabrication.
- B. Fabricate cages of steel and place into excavation.
- C. Place steel accurately and symmetrically about axis of shaft and hold securely in place during placement of concrete.

3.3 CONCRETE PLACEMENT

- A. Place concrete immediately after excavation and inspection of footing.
- B. Pump out any water in excavation that may cause segregation of concrete.
- C. Place concrete in one continuous operation and vibrate for consolidation.

END OF SECTION 31 63 24

BEAUMONT

TEXAS

CITY OF BEAUMONT COMPLEX-4 LIGHT POLE REPAIRS BEAUMONT, TEXAS



SIGMAENGINEERS

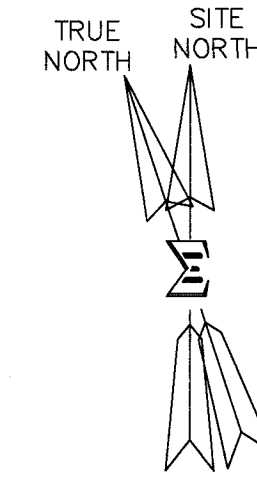
Innovative Solutions | Solid Designs

4099 CALDER BEAUMONT, TEXAS 77706

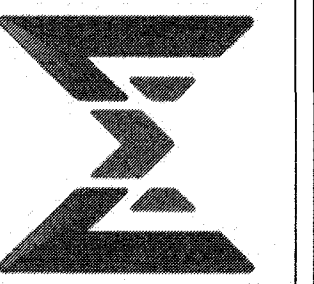
TEL. (409) 898-1001

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LOCATION PLAN
NTS



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4099 Calder Avenue

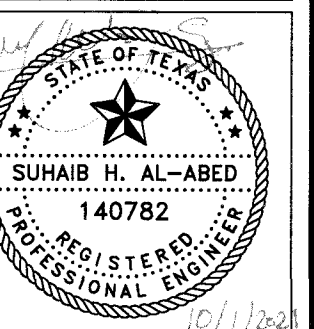
Beaumont, Texas 77706

Phone (409) 898-1001

Fax (409) 898-3420

sigmaengineers.com

**ATHLETIC COMPLEX
COMPLEX 4
LIGHT POLE REPAIRS
BEAUMONT, TEXAS**



TAS #:

ISSUED FOR
BIDS & CONSTRUCTION
10/01/2021

AB
DRAWN BY
SHA
CHECKED BY
SKN
APPROVED BY

SHEET NUMBER

COV-1

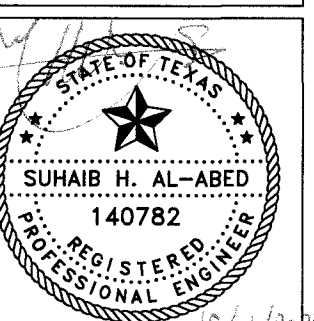
21-340
PROJECT NO.

SCHEDULE OF DRAWINGS

COV-1 COVER SHEET
C1 SITE PLAN
C2 LIGHT POLE FOUNDATION AND DETAILS

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ATHLETIC COMPLEX
COMPLEX 4
LIGHT POLE REPAIRS
BEAUMONT, TEXAS



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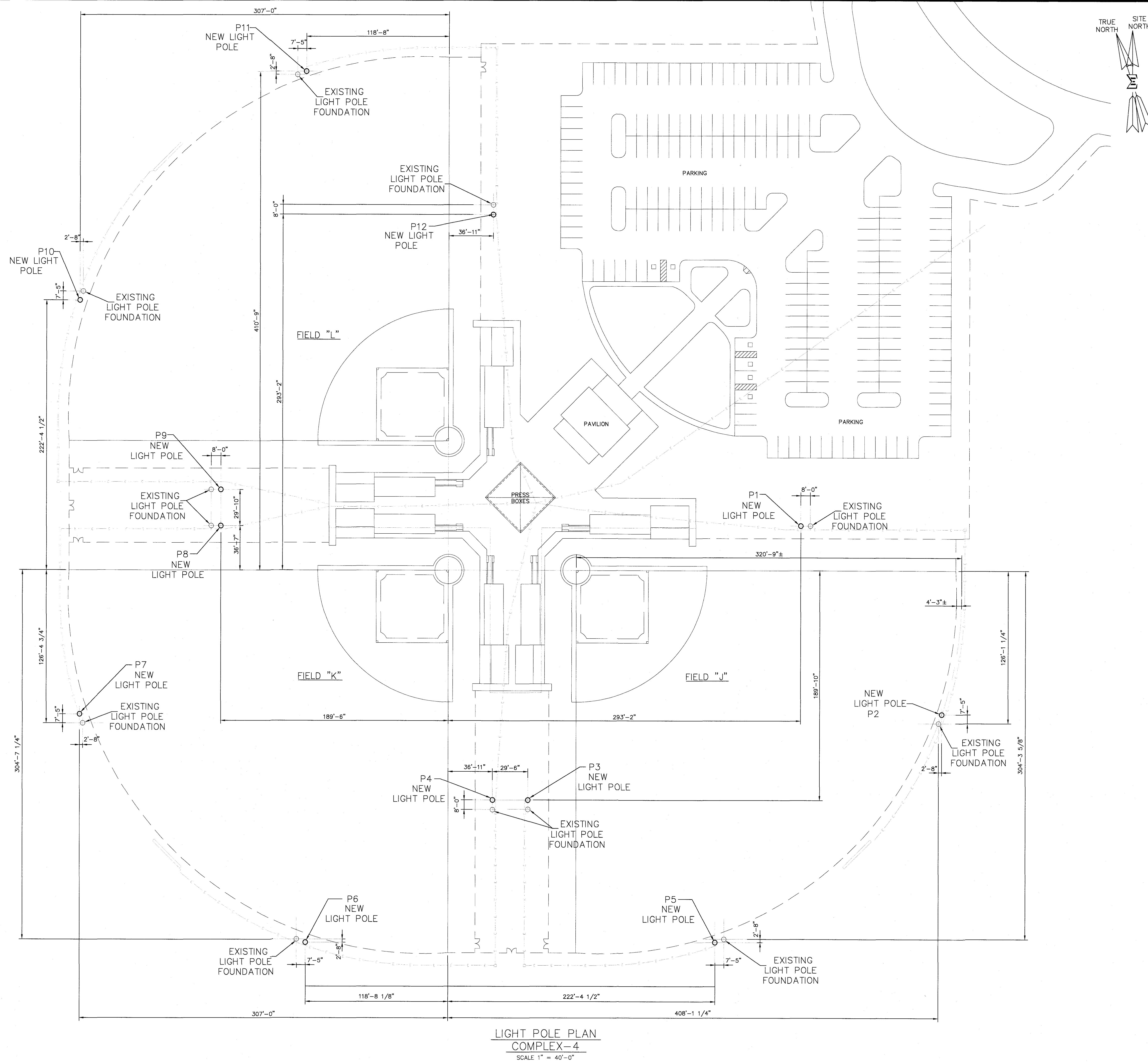
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DS & CONSTRUCTION
10/01/2021

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SHEET NUMBER

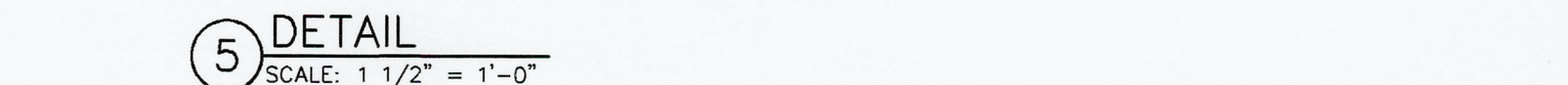
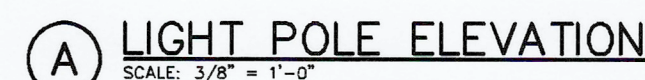
C1

21-340
PROJECT NO.



NOTE:
NO EXECUTION SHALL START PRIOR TO IDENTIFYING THE LOCATION OF ALL EXISTING UTILITIES.

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~ END OF TECHNICAL SPECIFICATIONS ~

BID OPENING DATE: Thursday, March 3, 2022

BID OPENING TIME: 2:00 P.M. (CST)

CITY BID NUMBER: TF0122-12

FOR FURNISHING: Contract for the Athletic Complex #4
Softball Field Light Pole Project
Located at 950 Langham Rd., Beaumont, Texas 77707
(AS PER SPECIFICATIONS)

SUBMIT BID TO: This is a FORMAL BID and must be submitted
in a SEALED ENVELOPE with the BID NUMBER
written on the outside of the envelope and sent to:

Office of the City Clerk / City Hall
City of Beaumont
801 Main St., Room 125
Beaumont, TX 77701

You may submit your bid by MAIL, in PERSON, or by COURIER.
Bids will NOT be accepted via email or Fax.

OUTLINE OF REQUIRED BID DOCUMENTS:

For bids to be considered valid, Bidders **MUST** complete and submit the following:

1. Bid Sheet, pages 18 through 56. See page 4, item 5, for more detail.
2. Provide a **valid signature** at the appropriate locations within these bid documents.

BIDDER'S INFORMATION SHEET

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12**

BIDDER INFORMATION:

Bidder's Company Name	
Bidder's Name In Printed Form	
Bidder's Signature	<hr/> (Signature required for bid to be accepted.)
Bidder's Title	
Company Physical Address	<hr/> Street <hr/> City State Zip Code
Company Mailing Address	<hr/> Street or P.O. Box <hr/> City State Zip Code
Company Telephone Number	
Alternate Phone Number	
Company Fax Number	
E-mail Address	

NOTE: Failure to manually sign this form may disqualify bid.

BIDDER'S INFORMATION SHEET

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12**

[Completion of this section satisfies page 7, item 16.]

MUST INSERT NAME OF BIDDER'S COMPANY:

1. Kind of Company (check one): ☐ Corporation ☐ Partnership ☐ Sole Proprietor

If corporation, please list names and addresses of three (3) top corporation officers.

If partnership, please list names and addresses of partners.

Include Federal Tax I.D. Number: _____

Name / Position _____

Address _____

Name / Position _____

Address _____

Name / Position _____

Address _____

2. Gross Revenues of past two (2) years: \$_____

3. Largest dollar amount of contract currently in effect with a business: \$_____

4. Has your organization ever failed to complete any work that it was awarded? Yes ____ No ____

If Yes, please provide explanation. _____

5. Provide information concerning any judgments, claims arbitration proceedings or suits filed as a result of projects performed.

6. Has your organization (including owners, partners, and or officers) ever been put on probation or disbarred from doing business with ANY governmental agency? If so, please list organization, time, and length of disbarment or probation. (Failure to provide this information may result in the City not awarding the contract to your company).

Yes____ No_____

If marked Yes, please list required information below:

7. REFERENCES

List three (3) businesses for whom your company has provided similar services within the past eighteen (18) months. List a contact name, address and phone number for each project.

REFERENCE #1

Company Name: _____

Contact Person: _____

Phone Number: _____

Dates of Service: _____

Value of Service: _____

REFERENCE #2

Company Name: _____

Contact Person: _____

Phone Number: _____

Dates of Service: _____

Value of Service: _____

REFERENCE #3

Company Name: _____

Contact Person: _____

Phone Number: _____

Dates of Service: _____

Value of Service: _____

BID TABLE

Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12

Description	Bid Price
TOTAL FOR BASE BID - For furnishing labor, material, equipment, and supervision necessary to repair the twelve (12) light poles at the Beaumont Athletic Complex #4 Softball Field, PER SPECIFICATIONS	\$
Project Completion Time for Base Bid: _____ Calendar Days	

MUST INSERT BIDDING VENDORS COMPANY NAME:

Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12

Texas Ethics Commission Certificate Number

HB 1295 -- Section 2252.098 of the Government Code states “a contract that requires an action or vote by the governing body of the entity or agency, or the value of the contract is at least one million dollars (\$1,000,000), must provide a Disclosure of Interested Parties Form on the Texas Ethics Commission website”.

Within five (5) working days after the award of contract by Beaumont City Council, the awarded vendor must complete the information requested on the Texas Ethics Commission website and provide the certificate number to the Purchasing Department. The Texas Ethics Commission website is: www.ethics.state.tx.us

At the home page, click on Form 1295 Filing Application, and follow the instructions. Upon completion of the information on the website, **provide the completed form and certificate number to the following Purchasing e-mail addresses:**

terry.welch@beaumonttexas.gov

I understand the requirement as stated above and will comply within five (5) working days after the award of contract by Beaumont City Council.

Signature

Company Name

Printed Name

Date Signed

Title

Revised 4/29/16 /bd

Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12

House Bill 89 (HB89) Verification

I, _____, the undersigned representative of
_____, (Company or Business Name)
(Company or Business Name) (hereafter referred to as "Company"), being an adult over the age of eighteen (18) years of age,
verify that the company named-above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

1. Does not boycott Israel currently; and
2. Will not boycott Israel during the term of the contract the above-named Company, business or individual with the City of Beaumont, Texas.

Pursuant to Section 2270.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and
2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly-owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.

DATE

SIGNATURE OF COMPANY

REPRESENTATIVE ON THIS THE _____ day of _____, 20_____, personally appeared
_____, the above-named person, who after by me being duly
sworn, did swear and confirm that the above is true and correct.

NOTARY SEAL

NOTARY SIGNATURE

Senate Bill 252 Ch. 2252 Certification

Pursuant to Texas Government Code, Chapter 2252, Section 2252.152 and Section 2252.153, certify that the company named above is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2252.153. I further certify that should the above-named company enter into a contract that is on said listing of companies on the website to the Comptroller of the State of Texas which do business with Iran, Sudan or any foreign terrorist organization, I will immediately notify the City of Beaumont's Purchasing Department.

Date Signed

Signature of Company Representative

Name in Printed Form

[THIS FORM MUST BE RETURNED WITH YOUR BID.]

BID SHEET CONTINUED

DATE OF DELIVERY AFTER RECEIPT OF ORDER: _____

WARRANTY: _____

Receipt is hereby acknowledged of the following addenda to the Specifications:

Addendum No. 1 dated _____	Received _____
Addendum No. 2 dated _____	Received _____
Addendum No. 3 dated _____	Received _____
Addendum No. 4 dated _____	Received _____

DOES YOUR BID MEET SPECIFICATIONS? YES _____ NO _____

IF NO IS INDICATED, ATTACH SHEET INDICATING EXCEPTIONS.

PLEASE CHECK THE FOLLOWING THAT WILL APPLY TO YOUR COMPANY:

Ownership of Firm (51% or more) _____ Non-Minority _____ Hispanic _____ Black _____ Other _____
Minority (please specify) _____ Female Owned _____ Handicapped Owned _____
Small Business (less than \$1,000,000 annual receipts or 100 employees) _____

CERTIFICATE OF CORPORATE BIDDER

I, _____, CERTIFY THAT
I AM _____, (title) OF
THE CORPORATION NAMED AS BIDDER
HEREIN; THAT _____ WHO
SIGNED THIS BID ON BEHALF OF THE BIDDER,
WAS THEN _____
, (title) OF SAID CORPORATION; THAT SAID BID
WAS DULY SIGNED FOR AND ON BEHALF OF
SAID CORPORATION BY AUTHORITY OF ITS
GOVERNING BODY AND IS WITHIN THE
SCOPE OF ITS CORPORATE POWERS.

SIGNATURE OF OFFICER

TYPE OR PRINT NAME

TITLE OF OFFICER

BIDDERS

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Vendor _____

Address _____

Bidder _____
(Signature)

Bidder _____
(Print Name)

Position With Company _____
(Title)

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐

Yes

☐

No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐

Yes

☐

No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 ☐ **Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).**

7

Signature of vendor doing business with the government entity

Date

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

- (2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period

preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity. (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

- (1) the date that the vendor:

- (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
 - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity;
- or

- (2) the date the vendor becomes aware:

- (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
- (B) that the vendor has given one or more gifts described by Subsection (a); or
- (C) of a family relationship with a local government officer.

**STATEMENT OF CITY CHARTER
PROVISION ON CONFLICT OF INTEREST**

The following provisions were adopted in an effort to avoid potential conflict of interest with prospective bidders and City employees or officers in the awarding of City contracts:

1. No officer, elected or appointed, or other employee of the City shall have a financial interest, direct or indirect, or by reason of ownership of stock or share exceeding one percent (1%) in a business entity contracting with the City. Nor shall such officer or employee be financially interested, directly or indirectly, in the sale to the City of any land, materials, supplies or services from such business entity, except on behalf of the City in his official capacity as an officer or employee.
2. Any willful violation of this provision shall constitute malfeasance in office and any officer or employee guilty thereof shall thereby forfeit their office or position.
3. Any violation of this section with the knowledge expressed or implied of the person or business entity contracting with the City shall render the contract involved **null and void**. (Beaumont City Charter, Article XVII, Section 9.)

I, _____ (name) have read and hereby understand the aforementioned Beaumont City Charter provision prohibiting conflict of interest between City employees or officers and prospective bidders in the award of City contracts. I affirm, to the best of my knowledge and belief, that there is no conflict of interest between the herein stated person or business entity and any City officer or employee if a City contract is awarded. I further state that I have no outside interests that conflict or suggest a potential conflict of interest with the City. I understand that knowledge, express or implied, or concealment of such material fact could nullify and void any such City contract awarded.

If I am awarded this contract, I herein agree to report promptly any further situation that might involve or appear to involve me in any conflict of interest with the City.

SIGNED this the ____ day of _____, 20 ____.

Name

Title

GENERAL CONDITIONS OF BIDDING
(Revised 2/13/19)

FAILURE TO COMPLY WITH THESE GENERAL CONDITIONS OF BIDDING MAY RESULT IN THE BID BEING DISQUALIFIED.

1. **BIDDING:**

- A. All bids must be on blank forms furnished by the Purchasing Division, and must be written in ink or by typewriter. Pencil quotations will not be considered. The bid must be executed personally by the bidder, or if executed by an agent, a power of attorney or other evidence of his authority to act on behalf of the bidder must accompany the bid. If the bidder is a corporation, the certificate of corporate bidder must be executed under the corporate seal by some duly authorized officer of the corporation other than the officers signing the bid. By execution of the bid, the bidder accepts all general and special conditions of the contract and the specifications.
- B. **TIME & DATE:** Formal bids must be in the office of the City Clerk by 2:00 P.M., local time, on the day bids are due, unless otherwise specified; an early postmark will not suffice. Be sure you have allowed ample time for postal delivery. The City will not be responsible for the delivery of your bid to the office of the City Clerk. If you choose to send your bid by postal delivery then it is recommended that you call the City Clerk's office to verify receipt of your bid prior the bid opening. **Formal bids may NOT be faxed or e-mailed.**

Informal bids are due at the date and time stated in the bid document. **Informal bids may be faxed.**
- C. **WITHDRAWAL OF BID:** A bidder may withdraw his proposal before Council acceptance of his bid without prejudice to himself, by submitting a written request for its withdrawal to the City Clerk.
- D. Bids should show net prices, extensions and net total. In case of conflict between unit price and extensions, the unit price will govern.
- E. No change in price will be considered after bids have been opened.
- F. Unless otherwise specified, any catalog or manufacturer's reference or brand name used in describing an item is merely descriptive, and not restrictive, and is used only to indicate type, style or quality of material desired. If a bidder quotes on an article other than the one specified, which he considers comparable, the name and grade of said article must be specified in the bid and sufficient specifications and descriptive data must accompany

same to permit thorough evaluation. In the absence of these qualifications, he will be expected to furnish the article called for.

- G. If this bid is altered, any erasure or alteration of figures on the item on which the erasure or alteration is made must be initialed by signee of this bid.
- H. Bids will not be considered in cases in which bidder quotes an item price and also an alternate price on the proposed substitute item, except in cases in which alternate bids are called for.
- I. All bids are to be delivered not later than the time stated in the specifications, F.O.B. Beaumont, Texas unless otherwise stated in the specifications and/or bid form.
- J. Bidders are invited to be present at the opening of bids. After opening, bids may be inspected in the Purchasing Division offices.
- K. If there is an honest mistake in the bid, due to clerical errors, and the bidder calls attention thereto promptly, he will not be bound by the bid.
- L. Where the mistake was a result of bidder's negligence, and City has no knowledge of the mistake when bids were opened, and contract awarded, he will not be released and shall be bound by the bid.
- M. If a mistake is not discoverable and verifiable by the City, bidder's incorrect interpretation of Engineering specifications set forth in a construction contract will not release him from his obligations, once a contract has been awarded by City Council and bidder has received notice of such award.
- N. Sealed formal bids due in the City Clerk's office will not be accepted through facsimile equipment.

2. **TAXES:**

- A. The City is exempt from the Federal Excise and Transportation Tax, and the Limited Sales and Use Tax. Unless the bid form or specification specifically indicates otherwise, the price bid must be net exclusive of the above mentioned taxes, and will be so construed. A vendor desiring refunds of, or exemptions from taxes paid on merchandise accepted by the City must submit the proper forms. The Purchasing Manager, if satisfied as to the facts, will approve or issue the necessary certificates.

3. **AWARD:**

- A. The City reserves the right to consider and make awards of bids on articles of similar nature that in all respects will serve the purpose for which the purchase is being made. The City reserves the right to be the

sole judge as to whether such articles will serve the purpose.

- B. Unless otherwise specified, the City reserves the right to accept or reject in whole or in part any bid submitted or to waive any informalities in the best interest of the City.
- C. Contractor is an independent contractor. Award of a contract does not create a joint venture between Contractor and the City.

4. **BID DEPOSIT:**

- A. No bid deposit will be expected of bidder unless specifications expressly provide otherwise.
- B. When specifications expressly call for a bid deposit, the deposit may be in the form of a cashier's check, cash, a certified check made payable to the City of Beaumont or a bond. The bond shall be executed by a surety authorized by the Texas State Insurance Commission and must be signed by both the surety and the bidder.
- C. When specifications call for a bid deposit, it should be placed in a separate bid envelope and enclosed with your bid. Should your bid deposit not be acceptable to the City, your bid will be returned.

5. **DELIVERIES:**

- A. Unless otherwise stated in the bid form or specification, deliveries must consist only of new and unused merchandise.
- B. Full fare must be allowed and no charge made for packages.
- C. In the event that deliveries of the supplies covered in the proposal are not made within the number of days specified, or in the event that the supplies delivered are rejected, and are not removed and replaced within the number of days specified in the official notice of rejection, the City reserves the right to purchase said supplied in the open market. Upon any such breach of contract, the City reserves the right to proceed against the successful bidder and/or the surety on this bond for any and all damages occasioned by the breach.

6. **REJECTIONS:**

- A. Articles not in accordance with samples and specifications must be removed by the bidder at his expense. All disputes concerning quality of supplies delivered under this proposal will be determined by the City Purchasing Manager or his/her designated representative.

- B. All articles enumerated in the proposal shall be subject to inspection or delivery by an officer designated for the purpose and if found inferior to the quality called for, or not equal in value to the department's samples, or deficient in weight, measurements, workmanship or otherwise, this fact shall be certified to the Purchasing Manager who shall have the right to reject the whole or any part of the same.

7. **BILLING:**

- A. All bills are subject to approval by the Purchasing Manager.

8. **PATENTS:**

- A. The contractor agrees to indemnify and hold harmless the City, the Purchasing Manager, and his/her assistants from all suits and actions of every nature and description brought against it or any of them, for or on account of the use of patented appliances, products or processes, and he shall pay all royalties and charges which are legal and equitable. Evidence of such payment or satisfaction shall be submitted, upon request of the Purchasing Manager, as a necessary requirement in connection with the final estimate for payment in which such patented appliances, products or processes are used.

9. **CONDITIONS PART OF BID:**

- A. The general conditions of bidding defined herein shall be a part of the attached bid.

10. **CONTRACT:**

- A. No formal contract will be executed. The following will comprise the contract between the City and the successful bidder:

- i. Notice to Bidders,
- ii. General Specifications,
- iii. General conditions of bidding,
- iv. The Bid Sheet(s),
- v. Resolution awarding the bid.

- B. In case of conflict, the specifications shall be controlling.

11. **OSHA REQUIREMENTS:**

- A. The vendor or contractor hereby guarantees to the City of Beaumont, Texas, that all material, supplies and equipment as listed on the proposal, contract or purchase order meets the requirements, specifications and standards as provided for under the Federal Occupational Safety and Health Act of 1970, as amended and in force at the date hereof.

12. **BIDS:**

- A. Bids must remain firm for thirty (30) days from the bid opening date to allow for award by Council, unless otherwise specified.

13. **DISCOUNTS:**

- A. Prompt payment discounts will be considered in making the award provided the period of the discount offered is sufficient to permit payment within such period in the regular course of business (minimum 10 days). Prompt payment discounts will not be considered for contract purchases.
- B. In connection with any discount offered, time will be computed from the date of receipt of supplies or services or from the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.

14. **DISCLOSURE FORMS:**

- A. **All forms must be signed and returned with your bid sheet.**

15. **EXCEPTIONS:**

- A. If exceptions are being taken to any part of specifications, have them listed separately on your letterhead and manually sign it.

16. **LOCAL BIDDER CONSIDERATION:**

- A. Should bids for goods and/or commodities be received from a local vendor and an out of town vendor, a sales tax impact analysis formula shall be applied to the local vendor's bid. If it is determined by its formula that the local vendor's bid generates more sales tax revenue to the City than the difference between the two bids, award may be made to the local vendor.

17. **PROTEST PROCEDURES** – Any actual or prospective bidder or proposer who believes they are aggrieved in connection with or pertaining to a bid or proposal may file a protest. The protest must be delivered in writing to the Purchasing Manager, in person or by certified mail, return receipt requested, prior to award. The written protest must include:

- A. Name, mailing address, and business phone number the protesting party;
- B. Appropriate identification of the bid or proposal being protested;
- C. A precise statement of the reasons for the protest; and

- D. Any documentation or other evidence supporting the protest and any alleged claims.

The Purchasing Division will attempt to resolve the protest, including at the Purchasing Manager's option, meeting with the protesting party. If the protest is successfully resolved by mutual agreement, written verification of the resolution, with specifics on each point addressed in the protest, will be forwarded to the Chief Financial Officer (CFO).

If the Purchasing Division is not successful in resolving the protest, the protesting party may request, in writing, that the protest be considered by the CFO. Applicable documentation and other information applying to the protest will be forwarded to the CFO, who will promptly review such documentation and information. If additional information is desired, the CFO may notify the necessary party or parties to the protest to provide such information.

If the CFO is not successful in resolving the protest, the CFO may forward to the City Manager a request for review. The decision of the City Manager will be final.

18. **PUBLIC INFORMATION ACT:**

- A. Texas Government Code, Chapter 552, gives you the right to access government records; and an officer for public information and the officer's agent may not ask why you want them. All government information is presumed to be available to the public. Certain exceptions may apply to the disclosure of the information. Governmental bodies shall promptly release requested information that is not confidential by law, either constitutional, statutory, or by judicial decision, or information for which an exception to disclosure has not been sought.
- B. To request information from this governmental body, please contact:

Tina Broussard, City Clerk
City Hall

Physical Address:

801 Main Street, Suite 125
Beaumont, TX 77701

Mailing Address:

P.O. Box 3827
Beaumont, TX 77704-3827

409-880-3740 Fax
409-880-3745 Phone

openrecords@beaumonttexas.gov

19. **WEBSITE** – Vendors are responsible for verifying all addendum to specifications downloaded from the City website.
20. **INTERLOCAL AGREEMENT** – Successful bidder agrees to extend prices to all entities who have entered into or will enter into joint purchasing interlocal cooperation agreements with the City of Beaumont. The City of Beaumont is a participating member of several interlocal cooperative purchasing agreements, as permitted under Chapter 791 of the Texas Government Code, with certain other political subdivision, authorizing participation in a cooperative purchasing program. The successful vendor may be asked to provide products/services based upon the bid price, to any other participant.
21. **FORCE MAJEURE** – Neither the City nor the Contractor shall be required to perform any term, condition or covenant of this contract so long as performance is delayed or prevented by force majeure.
22. **FUNDING OUT** – The State of Texas statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. Should, during the term of this contract, funds be withdrawn by the funding authority, a Force Majeure shall be deemed to exist, and this contract may be terminated without penalty or recourse by either party.
23. **TERMINATION** – This contract may be terminated by either party upon thirty (30) days' written notice.

Bid Bond Forms

BID BOND

STATE OF TEXAS §

KNOW ALL MEN BY THESE PRESENTS:

That _____ Contractor, as Principal,
and _____ as Surety,

are held and firmly bound unto City of Beaumont, Texas, herein called Owner, in the sum of

\$ _____
(Figure) (not less than five percent [5%] of the largest total amount of the bid)

(Written Form)

for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal has submitted a Bid to said Owner to perform the Work required under the Bidding Schedule(s) of the Owner's Contract Documents entitled:

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12**

NOW THEREFORE, if said Principal is awarded a contract by said Owner, and, within the time, and in the manner required in the Notice Inviting Bids and the Instructions to Bidders, enters into a written Agreement on the form of agreement bound with said Contract Documents, furnishes the required Certificates of Insurance, and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by said Owner and Owner prevails, said Surety shall pay all costs incurred by said Owner in such suit, including a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this _____ day of _____, 20_____.

(Principal)

(Principal)

(Title)

(Title)

(Surety)

(Surety)

(Witness)

(Witness)

(Seal)

(Seal)

PERFORMANCE BOND

STATE OF TEXAS §
COUNTY OF _____
BOND NO. _____

KNOW ALL BY THESE PRESENTS:

That _____ as Contractor,
and _____ as Surety,
are held firmly bound unto the City of Beaumont, Texas, hereinafter called Owner, in the penal sum of
\$ _____ Dollars, for the payment
of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns,
jointly and severally, firmly by these presents.

WHEREAS said Contractor has been awarded and is about to enter into the Agreement with said Owner to perform the Work as
specified or indicated in the Contract Documents entitled:

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12**

NOW THEREFORE, if said Contractor shall perform all the requirements of said Contract Documents required to be performed on its
part, at the times and in the manner specified herein, then this obligation shall be null and void, otherwise it shall remain in full force
and effect. If said Contractor fails in any contract requirement, Surety will, upon demand of Owner, proceed to complete the
Contractor’s obligations, at Surety’s expense.

PROVIDED, that any alterations in the Work to be done or the materials to be furnished, or changes in the time of completion, which
may be made pursuant to the terms of said Contract Documents, shall not in any way release said Contractor or said Surety thereunder,
nor shall any extensions of time granted under the provisions of said Contract Documents, release either said Contractor or said
Surety, and notice of such alterations or extensions of the Agreement is hereby waived by said Surety.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Article 5160 of the Revised Civil Statutes of Texas
as amended and all liabilities on this bond shall be determined in accordance with the provisions of said article to the same extent as if
it were copied at length herein.

SIGNED AND SEALED, this _____ day of _____, 20_____.

(Contractor)

(Signature)

(Title)

(Address)

(Witness)

(Seal)

(Surety)

(Signature)

(Title)

(Address)

(Witness)

(Seal)

PAYMENT BOND

STATE OF TEXAS §

COUNTY OF: _____

BOND NO. _____

KNOW ALL BY THESE PRESENTS:

That _____ as Contractor,
and _____ as Surety,
are held firmly bound unto the City of Beaumont, Texas, hereinafter called Owner, in the penal sum of
\$ _____ Dollars,
for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators,
successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Contractor has been awarded and is about to enter into the Agreement with said Owner to perform the Work as
specified or indicated in the Contract Documents entitled:

**Contract for the Athletic Complex #4
Softball Field Light Pole Repair Project
Located at 950 Langham Rd.,
Beaumont, Texas 77707
Bid No. TF0122-12**

NOW THEREFORE, if said Contractor, or subcontractor, fails to pay for any materials, equipment, or other supplies, or for rental of
same, used in connection with the performance of the work contracted to be done, or for amounts due under applicable State law for
any work or labor thereon, said Surety will pay the same in an amount not exceeding the sum specified above, and, in the event suit is
brought upon this Bond, a reasonable attorney's fee to be fixed by the Court. This Bond shall inure to the benefit of any and all
persons, companies, or corporations entitled to file claims under applicable State law.

PROVIDED, that any alterations in the work to be done or the materials to be furnished, or changes in the time of completion, which
may be made pursuant to the terms of said Contract Documents, shall not in any way release said Contractor or said Surety thereunder,
nor shall any extensions of time granted under the provisions of said Contract Documents, release either said Contractor or said
Surety, and notice of said alterations or extensions of the Agreement is hereby waived by said Surety.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Article 5160 of the Revised Civil Statutes of Texas
as amended and all liabilities on this bond shall be determined in accordance with the provisions of said article to the same extent as if
it were copied at length herein.

SIGNED AND SEALED, this _____ day of _____, 20_____.

(Contractor)

(Surety)

(Signature)

(Signature)

(Title)

(Title)

(Address)

(Address)

(Witness)

(Witness)

(Seal)

(Seal)

Local Vendor Preference Policy and Forms

CITY OF BEAUMONT
LOCAL BIDDER PREFERENCE POLICY
Revised 4/1/13

I. PURPOSE

The Local Government Code, Sections 271.905(a) and 271.9051 allow the City to consider a vendor's principal place of business in awarding certain contracts by way of competitive bids. This consideration is in effect to promote economic development opportunities through the contract by employing local residents and increasing tax revenue.

Local Bidder Preference, as defined herein, will only be considered when a qualified low bidder is not a "local business" and a Local Bidder Consideration Claim form has been submitted by a "local business", in accordance with policy guidelines outlined below.

II. DEFINITIONS

A. Local Business:

1. Vendor whose principal place of business is currently within the limits of the City of Beaumont.
2. Vendor who has been in business within the city limits for at least two (2) years.
3. At least 15% of employees are Beaumont residents.

B. Principal Place of Business: A business must:

1. Currently own or lease a commercial building or space within the corporate city limits of Beaumont.
2. Have owned or leased a commercial building or space within the corporate city limits of Beaumont for a minimum of two (2) years.
3. At least 25% of the entity's inventory and workforce must be regularly based at the owned or leased location. In addition, a substantial role in the entity's performance of a commercially useful function or a substantial part of its operations must be conducted at this location. A location utilized solely as a post office box, mail drop or telephone message center and without any substantial work function or inventory, if applicable, does not qualify.

C. Local Bidder Consideration Claim Form: Form that must be completed and included with the bid response on which the business certifies the location of the business activities, number of current employees and number of residents employed, annual taxable sales, whether current on property and sales taxes, and the economic development benefits resulting from award of this contract.

III. GENERAL PROCEDURES

- A. Bids for purchase of tangible personal property where the amount is equal to or greater than \$500,000: If the City receives one or more bids from a bidder that is a “local business” and whose bid is within three percent (3%) of the lowest bid price received by the City from a bidder who is not a “local business”, the City may enter into a contract with:
- (a) the lowest responsible bidder, or
 - (b) the “local business” if a Local Bidder Consideration Claim Form has been submitted and all requirements have been met and it is determined that the bid is the best combination of price and economic development opportunity and value. The City may also reject all bids.
- B. Competitive Sealed Bids for purchase of construction services, where the amount is less than \$100,000 and for purchase of tangible personal property and services where the amount is less than \$500,000: If the City receives one or more bids from a bidder that is a “local business” and whose bid is within five percent (5%) of the lowest bid price received by the City from a bidder who is not a “local business” the City may enter into a contract with:
- (a) the lowest bidder, or
 - (b) the “local business” if a Local Bidder Consideration Claim Form has been submitted and all requirements of a “principal place of business” have and it is determined that the bid is the best combination of price and economic development opportunity and value. The City may also reject all bids.
- C. Exclusions: Purchases obtained through:
- (a) Request for Proposals, Quotes, or Qualifications,
 - (b) Cooperative Purchasing Programs,
 - (c) Interlocal Agreements, and
 - (d) Purchases involving, in whole or in part, federal funding or state funding.
 - (e) Telecommunications services.

- D. The chart below is a summary of the proposed procedure:

Local Government Code 271.9051	Local Government Code 271.905
5% Price Differential	3% Price Differential
A. Construction bids less than \$100,000	A. Bids for tangible personal property equal to or greater than \$500,000
B. Bids for tangible personal property and services less than \$500,000	

- E. Local Bidder Consideration Claim Form: A new form must be submitted with each competitive bid response. Late forms will not be accepted. The form serves to notify the City that the bidder would like local preference consideration and to ensure the qualification of the bidder as a local business and serves to meet the statute's requirement that the governing body find, in writing, that a bidder is a local business. This form shall be obtained from the Purchasing Division and shall be signed under penalty of perjury. **Failure to provide Local Bidder Consideration Claim Form at the time the bidder submits the bid shall constitute a waiver of any claim for preference.**
- F. Approval by governing body: Regardless of the amount, the City Council must approve all purchases and contracts in which the local preference policy is applied. The Local Bidder Consideration Claim form will be included with the agenda item for consideration.

LOCAL BIDDER CONSIDERATION CLAIM FORM

Form Revised 4/1/13 /bd

Sections 271.905 and 271.9051 of the Texas Local Government Code authorize a municipality to consider a vendor's location in the determination of a bid award if the lowest bid received is from a business outside the municipality and contracting with a local bidder would provide the best combination of price and other economic benefits to the municipality. The City of Beaumont has determined that the allowable preference shall be applied to local vendor bids for the purposes of evaluation when in the best interest of the City to do so. This request form and any attachments must be submitted with bid package to be considered by the City of Beaumont. Questions should be addressed to the Purchasing Division at 409-880-3720. Exclusions to the local preference include those purchases that are: sole-source, emergency, federally-funded, cooperative contracts, Requests for Quote or Proposal, or via interlocal Agreement as well as telecommunication services. The City reserves the right to accept or reject any bid or combination of bids.

The City requires the information below for consideration of a local bidder preference. (Information may be submitted in an attachment to this form.)

1) Location Eligibility: Principal place of business in Beaumont, Texas. Principal place of business is defined herein as: Business must own or lease a commercial building or space within the corporate city limits of Beaumont, which is used as a home base for 25% or more of its inventory and workforce. Business must be in operation for at least two (2) years. A location utilized solely as a post office box, mail drop, or telephone message center, and without any substantial work function or inventory, does not qualify.

- a) If yes, identify name of Business/DBA, address, and business structure (sole proprietorship, partnership, corporation, or other).

Name of Business/DBA: _____

Address: _____

City: _____ State _____ Zip _____

Business Structure: _____ Sole Proprietorship _____ Partnership _____ Corporation

_____ Other _____

- b) Name and city of residence of owner(s)/partners/corporate officers, as applicable.

Name: _____

City of Residence: _____

2) General Business Information:

- a) Year business established (Beaumont location) _____
- b) Most recent property tax valuation of real and personal property. (Please attach.) \$ _____
- c) Annual taxable sales (originating in Beaumont). \$ _____
- d) Is business current on all property and sales taxes at the time of this claim? YES _____ NO _____
- e) Total number of current employees: _____ Number of Beaumont-resident employees: _____

3) Economic Development benefits resulting from award of this contract:

- a) Will award of this contract result in the employment/retention of residents of the City of Beaumont? YES _____ NO _____
- b) Number of additional jobs created: _____ or retained for Beaumont resident-employees: _____
- c) Will subcontractors with principal places of business in the City of Beaumont be utilized? YES _____ NO _____
- d) Local subcontractors utilized, if applicable. Name, location, and contract value for each.

Name: _____

Address: _____

Contract Value: \$ _____

- e) Will award of this contract result in increased tax revenue to the City? YES _____ NO _____
- f) If Yes, check types of taxes. _____ Property Taxes _____ Sales Taxes _____ Hotel Occupancy Taxes
- g) Other economic development benefit deemed pertinent by applicant. _____



City of Beaumont
Beaumont, Texas

LOCAL BIDDER CONSIDERATION CERTIFICATION

Certificate of Information:

The undersigned does hereby affirm that the information supplied is true and correct as of the date hereof, under penalty of perjury.

City Bid Number/Quote for which the local preference is requested: _____

City Bid or Quote Number

Print Bidder's Company Name

Print Name of Bidder

Signature of Bidder

Date

THE STATE OF TEXAS §

COUNTY OF JEFFERSON §

Appeared before me the above-named _____, known to me to be the same, and swore that the information provided in response to the foregoing questions are true and correct to the best of his/her knowledge and belief, this _____ day of _____, 20____.

Notary Public, State of Texas

Printed Name

Commission

Attachment “B”

Insurance Information

ATTACHMENT "B"
(Revised 10/12/2021)

INSURANCE

SECTION A. Prior to the approval of this contract by the City, CONTRACTOR shall furnish a completed Insurance Certificate to the Purchasing office. The certificate shall be completed by an agent authorized to bind the named underwriter(s) to the coverages, limits (on a form approved and provided by the City), and termination provisions shown thereon, and shall furnish and contain all required information referenced or indicated thereon. CITY SHALL HAVE NO DUTY TO PAY OR PERFORM UNDER THIS CONTRACT UNTIL SUCH CERTIFICATE IS RECEIVED BY THE CITY OF BEAUMONT'S PURCHASING DIVISION, and no officer or employee of the City shall have authority to waive this requirement.

INSURANCE COVERAGE REQUIRED

SECTION B. CITY reserves the right to review the insurance requirements of this section during the effective period of the contract and to adjust insurance coverages and their limits when deemed necessary and prudent by CITY, based upon changes in statutory law, court decisions, or the claims history of the industry as well as the CONTRACTOR.

SECTION C. Subject to CONTRACTOR'S right to maintain reasonable deductibles in such amounts as are approved by CITY, CONTRACTOR shall obtain and maintain in full force and effect for the duration of this contract, and any extension hereof, at CONTRACTOR'S sole expense, insurance coverage written by companies approved by the State of Texas and acceptable to CITY, in the following type(s) and amount(s):

	<u>Type of Coverage</u>	<u>Limits of Liability</u>	
1.	Workers' Compensation	Statutory	
2.	Employer's Liability	\$100,000	\$300,000
3.	Commercial General (public) Liability		
	a. Bodily Injury (ea.oc.)	\$1,000,000	\$3,000,000
	b. Property Damage (Incl. Contractual Coverage of the Contractor's Indemnity under Section D hereof)	\$100,000 (ea. oc.)	\$300,000 (aggreg.)
4.	Comprehensive Automobile Liability		
	a. Bodily Injury	\$300,000 (ea. pers.)	\$1,000,000 (ea. oc.)
	b. Property Damage	\$300,000(ea. oc.)	
5.	Owner's Commercial General Liability Insurance Policy:		
	The Contract shall obtain at his expense an Owner's Protective Liability Insurance Policy naming the <u>City of Beaumont and its employees</u> as insured with the following limits.		
	a. Bodily Injury	\$1,000,000 (ea. pers.)	\$1,000,000 (ea. oc.)
6.	Builder's Risk Insurance:		
	The Contractor shall obtain at his expense Builder's Risk Insurance against the perils of fire, lightning, windstorm, hurricane, hail, explosion, riot, civil commotion, smoke, aircraft, land vehicles, vandalism and malicious mischief in the amount of insurance equal at all times to the insurable value of materials delivered and labor performed. The policy issued in the name of the Contractor shall also name his Subcontractors and the Owner as additional insured, as their respective interests may appear. The policy shall have endorsements as follows:		

"This insurance shall be specific as to coverage and not considered as contributing insurance with any permanent insurance maintained on the present premises."

All costs for the above specified insurance shall be borne by the Contractor. Insurance Requirement Affidavit shall be submitted with bid.

The Contractor shall require all subcontractors engaged to do work in connection with this contract to carry Public Liability and Property Damage Insurance in amounts not less than specified above.

ADDITIONAL POLICY ENDORSEMENTS

CITY shall be entitled, upon request, and without expense, to receive copies of the policies and all endorsements thereto and may make any reasonable request for deletion, revision, or modification of particular policy terms, conditions, limitations, or exclusions (except where policy provisions are established by law or regulation binding upon either of the parties hereto or the underwriter of any of such policies). Upon such request by CITY, CONTRACTOR shall exercise reasonable efforts to accomplish such changes in policy coverages, and shall pay the cost thereof.

REQUIRED PROVISIONS

CONTRACTOR agrees with respect to the above required insurance, all insurance contracts and certificate(s) of insurance will contain and state, in writing, on the certificate or its attachment, the following required provisions.

- a. Name, the CITY OF BEAUMONT and its officers, employees, and elected representatives as additional insured(s), (as the interest of each insured may appear) to all applicable coverage.
- b. Provide for thirty (30) days' notice to City for cancellation, non-renewal, or material change.
- c. Provide for notice to City at the address shown below by registered mail.
- d. CONTRACTOR agrees to waive subrogation against the City of Beaumont, its officers, employees, and elected representatives for injuries, including death, property damage, or any other loss to the extent same may be covered by the proceeds of insurance.
- e. Provide that all provisions of this agreement concerning liability, duty, and standard of care together shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies.
- f. For coverages that are **only** available with claims made policies, the required period of coverage will be determined by the following formula: Continuous coverage for the life of the contract, plus one (1) year (to provide coverage for the warranty period) and an extended discovery period for a minimum of five (5) years which shall begin at the end of the warranty period.

NOTICES

CONTRACTOR shall notify CITY in the event of any change in coverage and shall give such notices not less than fifteen (15) days prior to the change, which notice must be accompanied by a replacement CERTIFICATE OF INSURANCE. All notices shall be given to CITY at the following address:

Purchasing Division
City of Beaumont
P.O. Box 3827
Beaumont, TX 77704-3827

SECTION D. INDEMNIFICATION. The CONTRACTOR agrees to indemnify and save harmless the CITY OF BEAUMONT from any and all claims, causes of action, and damages of every kind, for injury to or death of any person and damages to property arising out of the construction of said improvements or the operations embraced by this contract, and including acts or omissions of the CITY OF BEAUMONT in connection with said construction.

SECTION E. Approval, disapproval, or failure to act by CITY regarding any insurance supplied by CONTRACTOR shall not relieve CONTRACTOR of full responsibility or liability for damages and accidents as set forth in the contract documents. Neither shall the bankruptcy, insolvency, or denial of liability by the insurance company exonerate CONTRACTOR from liability.

WORKERS COMPENSATION INSURANCE
for
Building or Construction Projects and Services Provided at City-Owned Facilities

TEXAS WORKERS' COMPENSATION COMMISSION RULE 28, §110.110

As required by the Texas Workers' Compensation Rule 28, §110.110, the Contractor shall accept the following definitions and comply with the following provisions:

Workers' Compensation Insurance Coverage

A. Definitions:

1. Certificate of coverage ("certificate")-A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.
2. Duration of the project-includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the City of Beaumont.
3. Persons providing services on the project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the Contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the Contractor and regardless of whether that person has employees. This includes, without limitation, independent Contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the Contractor providing services on the project, for the duration of the project.

C. The Contractor must provide a certificate of coverage to the City of Beaumont prior to being awarded the contract.

D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the City of Beaumont showing that coverage has been extended.

E. The Contractor shall obtain from each person providing services on a project, and provide to the City of Beaumont:

1. A certificate of coverage, prior to that person beginning work on the project, so the City of Beaumont will have on file certificates of coverage showing coverage for all persons providing services on the project; and
2. No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

F. The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

G. The Contractor shall notify the City of Beaumont in writing by certified mail or personal delivery, within ten (10) days after the Contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and

stating how a person may verify coverage and report lack of coverage.

- I. The Contractor shall contractually require each person with whom it contracts to provide services on a project, to:
1. Provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;
 2. Provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.
 3. Provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 4. Obtain from each other person with whom it contracts, and provide to the Contractor:
 - a. A certificate of coverage, prior to the other person beginning work on the project; and
 - b. A new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
 5. Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter;
 6. Notify the City of Beaumont in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
 7. Contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.
- J. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the City of Beaumont that all employees of the Contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the Contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- K. The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the City of Beaumont to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the City of Beaumont.

As defined by the Texas Labor Code, Chapter 269, Section 406.096(e), building or construction is defined as:

1. Erecting or preparing to erect a structure, including a building, bridge, roadway, public utility facility, or related appurtenance;
2. Remodeling, extending, repairing, or demolishing a structure; or
3. Otherwise improving real property or an appurtenance to real property through similar activities.

The employment of a maintenance employee who is not engaging in building or construction as the employer's primary business does not constitute engaging in building or construction.

**CITY OF BEAUMONT
INSURANCE REQUIREMENT AFFIDAVIT**

**To be Completed By Appropriate Insurance Agent
and submitted with bid proposal.**

I, the undersigned Agent/Broker, certify that the insurance requirements contained in this bid document have been reviewed by me with the below identified Contractor. If the below identified Contractor is awarded this contract by the City of Beaumont, I will be able to, within ten (10) days after being notified of such award, furnish a valid insurance certificate to the City meeting all of the requirements defined in this bid.

Agent (Signature)

Agent (Print)

Name of Agency/Broker: _____

Address of Agent/Broker: _____

City/State/Zip: _____

Agent/Broker Telephone #: () _____

CONTRACTOR'S NAME: _____

(Print or Type)

NOTE TO AGENT/BROKER

If this time requirement is not met, the City has the right to invalidate the bid award and award the contract to the next lowest bidder meeting specifications. Should an awarded bid be invalidated the Contractor may be liable for breach of contract. If you have any questions concerning these requirements, please contact the Purchasing Manager for the City of Beaumont at (409) 880-3720.



CERTIFICATE OF INSURANCE

Form No. COB1
Edition Date: 12/12/2018
Page 1 of 4

This form is for informational purposes only and certifies that policies of insurance listed below have been issued to insured named below and are in force at this time. Notwithstanding any requirements, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, insurance afforded by policies described herein is subject to all terms, exclusions and conditions of such policies.

Prior to the beginning of work, the vendor shall obtain the minimum insurance and endorsements specified. Agents must complete the form providing all requested information and submit by fax, U.S. mail or e-mail as requested by the City of Beaumont ("COB"). The endorsements listed below are required as attachments to this certificate; copies of the endorsements are also acceptable. PLEASE ATTACH ALL ENDORSEMENTS TO THIS FORM AND INCLUDE THE MATCHING POLICY NUMBER ON THE ENDORSEMENT. Only City of Beaumont certificates of insurance are acceptable; commercial carriers' certificates are not.

This certificate shall be completed by a licensed insurance agent:

Name and Address of Agency:

Phone: _____ / _____

Name and Address of Insured:

Phone: _____ / _____

Prime or Sub-Contractor?: _____

Name of Prime Contractor, if different from Insured:

City of Beaumont Reference:

Project Name: _____

Project Location: _____

Managing Dept.: _____

Project Mgr.: _____

Insurers Affording Coverages:

Insurer A

Insurer B

Insurer C

Insurer D



CERTIFICATE OF INSURANCE

Form No. COB1
Edition Date: 12/12/2018
Page 2 of 4

INSR LTR	TYPE OF INSURANCE	POLICY NO.	POLICY EFF. DATE (MM/DD/YYYY)	POLICY EXP. DATE (MM/DD/YYYY)	LIMITS OF LIABILITY	
	Commercial General Liability Policy As defined in the Policy, does the Policy provide:				Each Occurrence	\$
					General Aggregate	\$
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Completed Operations/Products			Completed Operations/ Products Aggregate	\$
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Contractual Liability			Personal & Advertising Injury	\$
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Explosion			Deductible or Self Insured Retention	\$
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Collapse				
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Underground				
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Contractors / Subcontractors Work				
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Aggregate Limits per Project Form - CG 2503 0509 or Equivalent			<input type="checkbox"/> Yes	
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Additional Insured Form (not construction) - CG 2010 1001 or Equivalent			<input type="checkbox"/> Yes	
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Completed Operations Additional Insured Form (construction only) - CG2037 1001 or Equivalent			<input type="checkbox"/> Yes	
		<input type="checkbox"/> Yes <input type="checkbox"/> No – 30 Day Notice of Cancellation Form - CG 2804 1093 or Equivalent			<input type="checkbox"/> Yes	
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Waiver of Subrogation Form - CG 2404 0509 or Equivalent			<input type="checkbox"/> Yes	
		Pollution / Environmental Impairment Policy				Occurrence
					Aggregate	\$
	Commercial Auto Liability Policy As defined in the Policy, does the Policy provide:				CSL	\$
					Bodily Injury (Per Incident)	\$
		<input type="checkbox"/> Yes <input type="checkbox"/> No – Any Auto			Bodily Injury (Per Person)	\$
		<input type="checkbox"/> Yes <input type="checkbox"/> No – All Owned Autos			Property Damage (Per Accident)	\$



CERTIFICATE OF INSURANCE

Form No. COB1
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	<input type="checkbox"/> Yes <input type="checkbox"/> No – Non-Owned Autos					
	<input type="checkbox"/> Yes <input type="checkbox"/> No – Hired Autos					
	<input type="checkbox"/> Yes <input type="checkbox"/> No – Waiver of Subrogation - CA0444 0410 or Equivalent <input type="checkbox"/> Yes					
	<input type="checkbox"/> Yes <input type="checkbox"/> No – 30 Day Notice of Cancellation - CA0244 or Equivalent <input type="checkbox"/> Yes					
	<input type="checkbox"/> Yes <input type="checkbox"/> No – Additional Insured - CA2048 or Equivalent <input type="checkbox"/> Yes					
	<input type="checkbox"/> Yes <input type="checkbox"/> No – MCS 90					
INSR LTR	TYPE OF INSURANCE	POLICY NO.	POLICY EFF. DATE (MM/DD/YYYY)	POLICY EXP. DATE (MM/DD/YYYY)	LIMITS OF LIABILITY	
	Excess Liability <input type="checkbox"/> Umbrella Form <input type="checkbox"/> Excess Liability Follow Form				Occurrence	\$
					Aggregate	\$
	Workers Compensation & Employers Liability As defined in the Policy, does the Policy provide				<input type="checkbox"/> Statutory	
					Each Accident	\$
					<input type="checkbox"/> Yes <input type="checkbox"/> No – Waiver of Subrogation - WC420304	
					<input type="checkbox"/> Yes <input type="checkbox"/> No – 30 Day Notice of Cancellation - WC420601	
	Is a Builders Risk or Installation Insurance Policy provided? <input type="checkbox"/> Yes <input type="checkbox"/> No					\$
	Professional Liability As defined in the Policy, does the Policy provide:				Each Claim	\$
					<input type="checkbox"/> Yes <input type="checkbox"/> No – 30 Day Notice of Cancellation Retroactive Date: _____	Deductible or Self Insured Retention



CERTIFICATE OF INSURANCE

Form No. COB1
Edition Date: 12/12/2018
Page 4 of 4

AGENT CERTIFICATION:

THIS IS TO CERTIFY TO THE CITY OF BEAUMONT
that the insurance policies above are in full force and effect.

Name of Insurance Company:	Name of Authorized Agent:
Company Address:	Agent's Address:
City: State: Zip:	City: State: Zip:
Authorized Agent's Phone Number (including Area Code):	Original signature of Authorized Agent: X _____
	Date:

CERTIFICATE HOLDER:

DATE ISSUED: _____

City of Beaumont

P. O. Box 3827
Beaumont, Texas 77704-3827

AUTHORIZED REPRESENTATIVE SIGNATURE
Licensed Insurance Agent

Printed Name: _____

WAGE REQUIREMENTS

1. DAVIS-BACON ACT

Davis-Bacon Act

TITLE 40-PUBLIC BUILDINGS, PROPERTY, AND WORKS

* * * * *

SUBTITLE II-PUBLIC BUILDINGS AND WORKS

PART A-GENERAL

* * * * *

CHAPTER 31 - GENERAL

* * * * *

SUBCHAPTER IV - WAGE RATE REQUIREMENTS

Sec. 3141. Definitions

In this subchapter, the following definitions apply:

(1) Federal government.- The term "Federal Government" has the same meaning that the term "United States" had in the Act of March 3, 1931 (ch. 411, 46 Stat. 1494) (known as the Davis-Bacon Act).²

(2) Wages, scale of wages, wage rates, minimum wages, and prevailing wages.- The terms "wages", "scale of wages", "wage rates", "minimum wages", and "prevailing wages" include-

- (A) the basic hourly rate of pay; and
- (B) for medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing, for unemployment benefits, life insurance, disability and sickness insurance, or accident insurance, for vacation and holiday pay, for defraying the costs of apprenticeship or other similar programs, or for other bona fide fringe benefits, but only where the contractor or subcontractor is not required by other federal, state, or local law to provide any of those benefits, the amount of-
 - (i) the rate of contribution irrevocably made by a contractor or subcontractor to a trustee or to a third person under a fund, plan, or program; and
 - (ii) the rate of costs to the contractor or subcontractor that may be reasonably anticipated in providing benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a financially responsible plan or program which was communicated in writing to the laborers and mechanics affected.

Sec. 3142. Rate of wages for laborers and mechanics

(a) Application.- The advertised specifications for every contract in excess of \$2,000, to which the Federal Government or the District of Columbia is a party, for construction, alteration, or

repair, including painting and decorating, of public buildings and public works of the Government or the District of Columbia that are located in a State or the District of Columbia and which requires or involves the employment of mechanics or laborers shall contain a provision stating the minimum wages to be paid various classes of laborers and mechanics.

(b) Based on Prevailing Wage.- The minimum wages shall be based on the wages the Secretary of Labor determines to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State in which the work is to be performed, or in the District of Columbia if the work is to be performed there.

(c) Stipulations Required in Contract.- Every contract based upon the specifications referred to in subsection (a) must contain stipulations that-

- (1) the contractor or subcontractor shall pay all mechanics and laborers employed directly on the site of the work, unconditionally and at least once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and the laborers and mechanics;
- (2) the contractor will post the scale of wages to be paid in a prominent and easily accessible place at the site of the work; and
- (3) there may be withheld from the contractor so much of accrued payments as the contracting officer considers necessary to pay to laborers and mechanics employed by the contractor or any subcontractor on the work the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and the rates of wages received by the laborers and mechanics and not refunded to the contractor or subcontractors or their agents.

(d) Discharge of Obligation.- The obligation of a contractor or subcontractor to make payment in accordance with the prevailing wage determinations of the Secretary of Labor, under this subchapter and other laws incorporating this subchapter by reference, may be discharged by making payments in cash, by making contributions described in section 3141(2)(B)(i) of this title, by assuming an enforceable commitment to bear the costs of a plan or program referred to in section 3141(2)(B)(ii) of this title, or by any combination of payment, contribution, and assumption, where the aggregate of the payments, contributions, and costs is not less than the basic hourly rate of pay plus the amount referred to in section 3141(2)(B) of this title.

(e) Overtime Pay.- In determining the overtime pay to which a laborer or mechanic is entitled under any federal law, the regular or basic hourly rate of pay (or other alternative rate on which premium rate of overtime compensation is computed) of the laborer or mechanic is deemed to be the rate computed under section 3141(2)(A) of this title, except that where the amount of payments, contributions, or costs incurred with respect to the laborer or mechanic exceeds the applicable prevailing wage, the regular or basic hourly rate of pay (or other alternative rate) is the amount of payments, contributions, or costs actually incurred with respect to the laborer or

mechanic minus the greater of the amount of contributions or costs of the types described in section 3141(2)(B) of this title actually incurred with respect to the laborer or mechanic or the amount determined under section 3141(2)(B) of this title but not actually paid.

Sec. 3143. Termination of work on failure to pay agreed wages

Every contract within the scope of this subchapter shall contain a provision that if the contracting officer finds that any laborer or mechanic employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid, the Federal Government by written notice to the contractor may terminate the contractor's right to proceed with the work or the part of the work as to which there has been a failure to pay the required wages. The Government may have the work completed, by contract or otherwise, and the contractor and the contractor's sureties shall be liable to the Government for any excess costs the Government incurs.

Sec. 3144. Authority of Comptroller General to pay wages and list contractors violating contracts

(a) Payment of Wages.-

- (1) In general.- The Comptroller General shall pay directly to laborers and mechanics from any accrued payments withheld under the terms of a contract any wages found to be due laborers and mechanics under this subchapter.
- (2) Right of action.- If the accrued payments withheld under the terms of the contract are insufficient to reimburse all the laborers and mechanics who have not been paid the wages required under this subchapter, the laborers and mechanics have the same right to bring a civil action and intervene against the contractor and the contractor's sureties as is conferred by law on persons furnishing labor or materials. In those proceedings it is not a defense that the laborers and mechanics accepted or agreed to accept less than the required rate of wages or voluntarily made refunds.

(b) List of Contractors Violating Contracts.-

- (1) In general.- The Comptroller General shall distribute to all departments of the Federal Government a list of the names of persons whom the Comptroller General has found to have disregarded their obligations to employees and subcontractors.
- (2) Restriction on awarding contracts.- No contract shall be awarded to persons appearing on the list or to any firm, corporation, partnership, or association in which the persons have an interest until three years have elapsed from the date of publication of the list.

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Sec. 3146. Effect on other federal laws

This subchapter does not supersede or impair any authority otherwise granted by federal law to provide for the establishment of specific wage rates.

Sec. 3147. Suspension of this subchapter during a national emergency

The President may suspend the provisions of this subchapter during a national emergency.

Sec. 3148. Application of this subchapter to certain contracts

This subchapter applies to a contract authorized by law that is made without regard to section 3709 of the Revised Statutes (41 U.S.C. 5), or on a cost-plus-a-fixed-fee basis or otherwise without advertising for proposals, if this subchapter otherwise would apply to the contract.

1. Pub. L. 109-284 Sec. 6(11), (12), and (13) made three minor technical corrections in Secs 3141(1), and 3142(d) and (e). (Sept. 27, 2006, 120 Stat.1213.)

2. The Davis-Bacon Act, referred to in par. (1), is act of Mar. 3, 1931, ch. 411, 46 Stat. 1494, as amended, which was classified generally to sections 276a to 276a-5 of former Title 40, Public Buildings, Property, and Works, and was repealed and reenacted as sections 3141-3144, 3146, and 3147 of this title by Pub. L. 107-217, Secs. 1, 6(b), Aug. 21, 2002, 116 Stat. 1062, 1304.

____ Initials of Authorized Representative of

END OF SPECIFICATIONS
